S0370-4

Alaska Population Overview

• Alaska Department of Labor

• **Jay S. Hammond,** Governor

Alaska Population Overview

Prepared by

Stephen D. Harrison

FIRST EDITION

December 1979

ALASKA DEPARTMENT OF LABOR **Edmund N. Orbeck,** *Commissioner*

RESEARCH AND ANALYSIS SECTION John E. Post, *Chief*

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FOREWORD

Alaska Population Overview began nearly a year ago as a hand-out of frequently requested population data. This report has been written for those who request population data most frequently. These are: program planners, market analysts, individuals writing proposals and studies, municipalities preparing grant applications, users of affirmative action data, health researchers, developers and users of State and Federal Revenue Sharing figures, and various other individuals interested in the history, composition, and future of the Alaska population. The size of this publication grew as the number and complexity of incoming requests and questions increased.

No state agency in Alaska is currently responsible for production and distribution of population information. Since there is strong demand for this information, the Department of Labor does publish population estimates which were originally developed for internal purposes. The Department of Labor also provides indicator data to the U.S. Census Bureau which is used to produce Census Bureau estimates for Alaska – relied upon between the ten year censuses. In response to demand for more detailed population information, the Alaska Department of Labor developed a proposal for state funding assistance of a continuing population estimating program. The Population Studies Division of the Office of Financial Management in Washington State graciously allowed us a week to study their operation and organization. Although the Department of Labor population study proposal was not approved in Fiscal Year 1980, there is a chance the proposal will be funded in Fiscal 1981.

Alaska Population Overview focuses upon historical and current fluctuations in the age, race, and sex composition of Alaska's population. This report also outlines changes of state sub-areas from 1960 Election Districts to 1970 Census Divisions, and then to 1980 census areas. Included is a discussion of population growth since the 1970 census examining the causes of growth in various census divisions. Migration and its influence upon the Alaska population are treated briefly. Race and active duty military figures are also presented. The methodology used to produce the 1978 population estimates is discussed in the Appendix.

This publication does not include the following types of data: income or poverty information, literacy, language, or family size information, the number of handicapped, educational attainment, marital status, veteran status data, or vital statistics.

The Alaska Department of Labor does publish a number of booklets detailing the employment, unemployment and wages of the various industries and occupations found in Alaska. An employment forecast publication, Alaska Employment Outlook to 1985 is also available. Labor market information may be obtained through the Alaska Department of Labor, Research and Analysis Section, Box 1149, Juneau, Alaska 99811. Phone (907) 465–4500.

ACKNOWLEDGEMENTS

I would like to acknowledge the assistance and support of all members of the Research and Analysis Section of the Alaska Department of Labor. Special mention should be made of the following: Cal Dauel, census division growth information; Virginia Baggs, Statistical Technician; Bertha Brooks, MTST and composer typing; Lorie Moles, typing; Naomi Templeton, graphics and layout; Kelly Wheeler, Statistical Technician; and Melanie Wilhelm, typing.

Special thanks are also due to: Charles Atwood and James Goodman of Continental Telephone who shared their techniques for producing population estimates and forecasts using indicator data; Mike Scott and Jim Kerr of the Institute of Social and Economic Research for data extracts from the 1976 Survey of Income and Education; and John Walker and the staff of the Population, Enrollment, and Economic Studies Division, Office of Financial Management, State of Washington for the time they spent explaining the organization and operation of their population study program.

INTRODUCTION

Alaska is a land of contrasts. Its large boundaries encompass several languages and a wide range of population densities and lifestyles. Alaskans inhabit the most expansive state in the U.S. The population of Alaska, however, is the smallest in the nation and approximately one half of all Alaskans reside in the Municipality of Anchorage. Alaska lifestyles vary significantly from place to place, and through seasons and years. Contrasts such as these complicate population studies in Alaska.

While maintaining a definite frontier aspect, the Alaska population is gradually becoming more like that of the rest of the United States. The Alaska Native population in spite of its high natural rate of growth is expanding much less rapidly than the general population which is bolstered by migration. Improvements in transportation and communications bring mixed blessings to the state – from the widening variety of food and produce available to the homogenization and centralization which may accompany these advances. The phenomenal growth accompanying pipeline construction days has raised questions concerning desirable rates of growth for Alaska's population and economy. These social and economic changes will continue to draw the demographic composition of Alaska nearer to national norms.

HIGHLIGHTS

- With roughly 0.2 percent of the U.S. population, Alaska is the nation's least populous state.

- Due in large part to migration, the Alaska population has grown an estimated 37 percent between 1970 and 1978 – a growth rate 5 times greater than the comparable U.S. rate.

- Nearly 40 percent of the Alaska residents of 1970 had been living outside of Alaska 5 years previous.

- Although the age/sex profile of Alaska is drifting nearer to that of the U.S., the Alaska population maintains distinctive elements of a frontier population.

- The military population in Alaska has declined an average of 3 percent annually since 1970. On July 1, 1979, the number of active duty military was roughly 23,300.

- The seven most rapidly growing census divisions between the years 1970 and 1978 all received direct or indirect stimulus from petroleum development. Moderate growth divisions were sustained by renewable resource industries.

- In the 1980 census, 23 census areas will be used as Alaska "counties". In 1970, 29 census divisions were used; and in the 1960 census, 24 election districts served as county equivalents for Alaska.

- Alaska's population size appears to have responded to several major historical events over the past century. Two distinct periods of population growth divide this 100 years of Alaskan history. The first, a period of very low growth, extends from the pre-Gold Rush era to the end of the Great Depression. The second, a period of rapid growth, spans from construction of the Alcan Highway to the present.

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HISTORY

The uniqueness of Alaska is reflected in the population of the state. Alaska offers a vast land mass, great natural wealth, and a prime strategic location in combination with severe weather, transportation and communications difficulties. Attempts to overcome the obstacles in order to tap the benefits have, by and large, shaped the population of Alaska. Certain marked changes in population size are related to historical events such as construction of the Alcan Highway in 1942. Changes in the age/sex profile, on the other hand, correspond with economic and military conditions. For example, increased readiness for World War II was reflected in a doubling of the number of males 20–24 years of age. This section discusses these population changes and concludes with a presentation of population projections to the year 1985.

POPULATION GROWTH: 1880–1980

Alaska's population growth appears to have been stimulated by several major historical events of the past century. Two distinct periods of population growth divide this 100 years of Alaskan history. The first, a period of very low growth, extends from the pre-Gold Rush era to the end of the Great Depression. The second, a period of rapid growth, spans from the construction of the Alcan Highway (1942) to the present.

Pre-Gold Rush – Great Depression

The first period began with ten quiet years as the population of Alaska declined slightly between the years 1880 and 1890. The next ten years, however, brought rapid growth. Within 30 years after the purchase of Alaska from Russia, the first of a succession of gold rushes began. Immigrants seeking quick financial gain contributed to an average annual population growth rate of more than nine percent over the ten year period which ended in 1900. The rampant expansion of the Gold Rush years was followed by a period of relative calm, beginning at the turn of the century. World War I broke out in 1914. Between 1910 and 1920, Alaska experienced its greatest ten year spell of population decline. Following this decline, slow growth was registered between the 1920 census and the 1930 census. More pronounced growth occurred during the Great Depression, suggesting that a substantial immigration resulted as people sought to avoid or overcome the poor economic conditions (lack of jobs) in the rest of the country. It is interesting to note that the mid-1970's recession also spurred immigration as Alaska's economy was bolstered by pipeline activity.

World War II – Present

In sharp contrast with the sedate beginning of the first major growth period, the second period began abruptly. This start was marked in 1939 with preparation for World War II, and was followed three years later by the construction of the Alcan Highway. An increasing awareness of the strategic importance of Alaska was beginning to emerge and the push was on to develop air bases and an over-land transportation corridor. An interplay of military movements, improved transportation, and other factors combined to produce an annual growth rate of approximately seven percent over the twenty years between 1940 and 1960. During the 1960's, population growth in Alaska slowed to a rate comparable to the moderate Alaska growth rates of the Great Depression years. With the 1970's came the discovery of oil at Prudhoe Bay, the Alaska Native Claims Settlement Act, the 200 mile offshore judiciary limit, and the Trans-Alaska Pipeline project. Direct

and indirect impacts of pipeline construction drove total nonagricultural wage and salary employment growth to a peak of 26 percent annually for two years, 1974 and 1975. The Alaska Department of Labor has estimated that resident population grew 15 percent in 1975, fueled by the influx of pipeline workers and other persons seeking work. Upon completion of the pipeline, this spectacular 15 percent population growth appears to have temporarily lapsed into very low growth. While employment growth in industry and government is taking up post pipeline slack, population growth is expected to be sluggish until 1981.

LAYOUT OF THE 100 YEAR GRAPH

Figure 1, Total Population of Alaska (100 years) is designed to illustrate various aspects of Alaska's population growth and to relate this growth to significant historical events in a long term perspective. The following describes basic parts of the graph and includes some guidelines for interpretation.

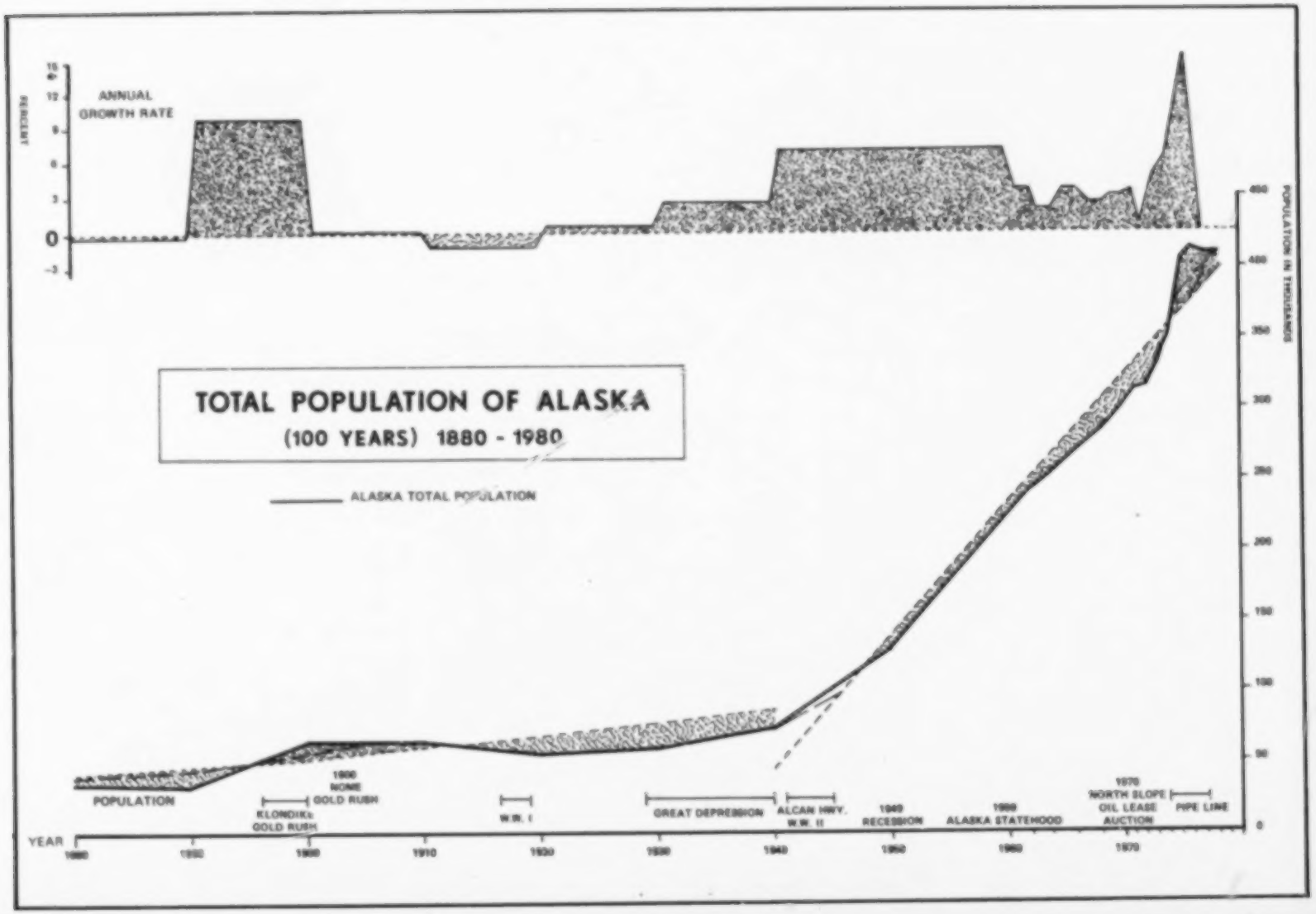
- The *Population Line* forms the foundation of this graph. The solid dark line represents the number of people in Alaska. Prior to 1961, population data is plotted at 10 year intervals. Between 1961–1969 and between 1971–1978, Department of Labor estimates are shown.

- The dashed *1880–1940 Trend Line* shows the straight line trend of population growth between 1880 and 1940. The area between the population line and the two trend lines has been *shaded* to highlight those time periods when population levels were above or below the long term trend. The steeper *1940–1978 trend line* shows an accelerated population growth after construction of the Alcan Highway.

- The top portion of the graph shows *Annual Growth Rates* ranging from 15 percent *annual population growth* to 3 percent *annual decline.* This line is particularly useful for comparing population growth rates for different time periods.

- Located just above the dates at the foot of the graph is the *identification of significant historical events.* These were included to provide historical reference points.

FIGURE 1


ANNUAL
GROWTH RATE
PERCENT
15
12
9
6
3
0
-3
TOTAL POPULATION OF ALASKA
(100 YEARS) 1880 - 1980
ALASKA TOTAL POPULATION
POPULATION IN THOUSANDS
450
400
350
300
250
200
150
100
50
0
POPULATION
1900
NOME
GOLD RUSH
KLONDIKE
GOLD RUSH
W.W. I
GREAT DEPRESSION
ALCAN HWY.
W.W. II
1949
RECESSION
1959
ALASKA STATEHOOD
1970
NORTH SLOPE
OIL LEASE
AUCTION
PIPE LINE
YEAR
1880
1890
1900
1910
1920
1930
1940
1950
1960
1970

CHANGES IN THE AGE/SEX PROFILES OF ALASKA

The age by sex composition of a population is influenced by various factors including fertility, mortality, migration, and military transfer. Alaska's age/sex profile has responded dramatically to economic and military conditions during this century. The first part of this section will trace historical changes of Alaska's age/sex profile. An explanation of Population Pyramids follows this section.

The Alaska population profile of 1900 pictures a frontier state. Heavily dominated by males age 20–50, there were 2.6 males per female in the general population. Alaska's population was roughly half white and half non-white. At that time, the number of non-white males and females was nearly equal; however, 9 white males were counted per white female in 1900. The median age was 29 years.

In the decades following 1900, census data provides glimpses of social change associated with Alaska's transition from a frontier into a more developed state. By 1910 a number of prospectors had left. Although many children had been born, the population profile had not changed significantly since 1900.

The population pyramid of 1920 shows that young men were leaving Alaska more rapidly than older men. Those pioneers who remained were aging, and there was a greater percentage of children. The size of the population had dropped 14 percent between the years 1910 and 1920.

From 1920 to 1930 Alaska's population grew a moderate 7 percent. Most of the remaining stampeders from Gold Rush days may be seen in the bulge of males 40–60 years of age. More women had immigrated and males comprised only 60 percent of the state's population.

By 1940 relatively few pioneers are seen in the pyramid, and a greater proportion of women and children are present.

By 1950, an increasing awareness of the strategic importance of Alaska had developed. The Alcan Highway had been built, and a significant build-up of military had again increased the proportion of males in Alaska (this ratio had been falling since 1900). The number of children was increasing in both absolute and relative terms, and the median age had fallen to roughly 26 years (down from 31 years in 1910).

Alaska was admitted to the union and the 49th star added in 1959. The census of 1960 showed many more children, fewer military, and more women. The median age had fallen to roughly 23 and the percentage of males had dropped to 55 percent. Alaska had been experiencing continuous high growth since 1940.

The 1970 census showed the Alaska age/sex composition to be more similar to the U.S. profile in overall shape despite the fact that Alaska is younger, has a greater military presence (10 percent), and is slightly more dominated by males (54 percent).

The foot of the 1970 population pyramids for both the U.S. and Alaska are "tucked in" at the bottom reflecting the end of post World War II baby boom. In 1970 the median age was nearly 23 in Alaska, compared to 28 for the U.S. as a whole.

Geographically, Alaska is the largest state. Demographically, Alaska is estimated to have the smallest state population in the U.S. Because the population is small, sudden development of Alaska's vast natural resources can bring about sweeping change in the demographic composition of the state. At the same time, improvements in

communications, transportation, economic development, and the growth of government have all tended to draw the population profile of Alaska towards that of the rest of the country.

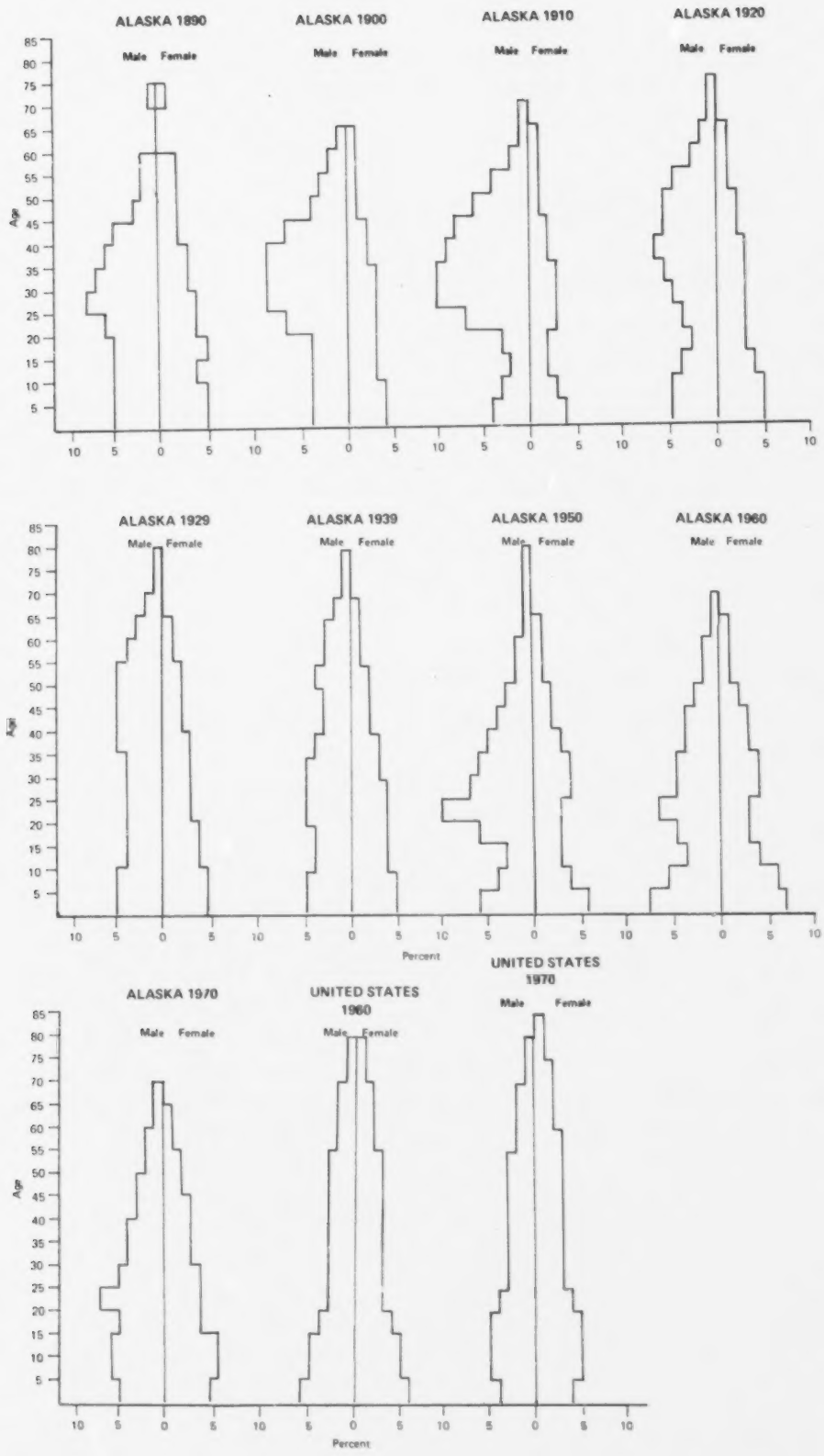
POPULATION PYRAMIDS: HOW TO READ THEM

This publication contains 40 diagrams ('population pyramids') illustrating the age-sex composition of Alaska at several points in time and by the 29 Alaska census divisions. These population pyramids are designed to display the relative proportions of males and females by age group. Each pyramid is centered on a vertical line above the '0' on the horizontal (percent) axis which extends to 10 percent in each direction. *Males are represented on the left of the center line* and *females are represented on the right.* Ascending the center line are five year age groups (under age 5, 5–9, 10-14, 15–19... 75–79, 80–84, 85 and above). The percentage of infants and children is represented at the bottom of the pyramid and the top of the pyramid represents the percentage of older people. From year-to-year and from place-to-place, population profiles can change shape dramatically.

The following observations will assist the reader in interpreting the population pyramids:

1. A narrow arm of males between 20 and 24 years of age often indicates military presence.
2. A narrowing of the pyramid above 20 years of age may signify that young adults have left home and relocated in other areas.
3. A bulge in the pyramid above 20 years of age may indicate that young adults from other places have immigrated.
4. A narrow arm of males 20 to 24 years of age across from a similar sized arm of females sometimes indicates a college or colleges in the area.
5. The base of the pyramid holds information relating to birth rates. If the base is very wide, this may indicate relatively large numbers of children had been born, and the opposite if the base is narrow.

FIGURE 2

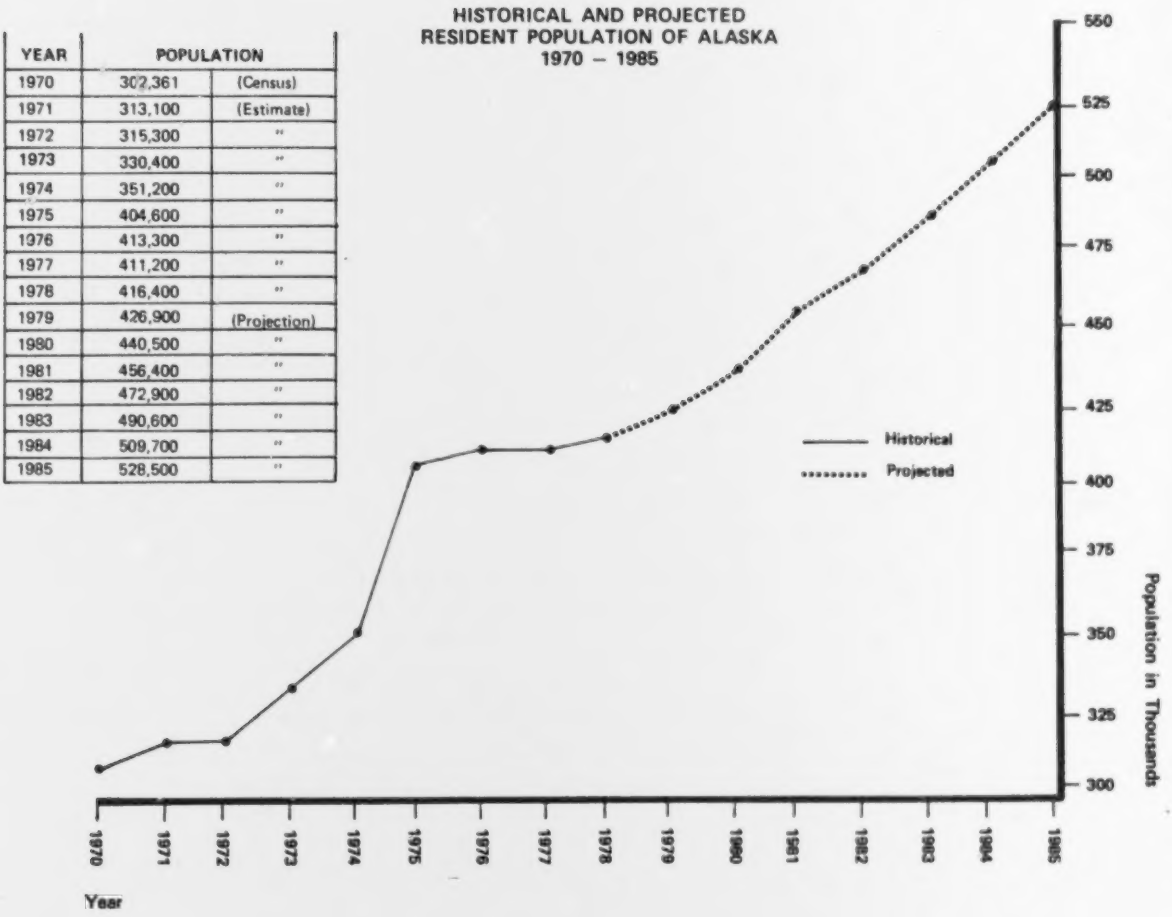

ALASKA 1890
ALASKA 1900
ALASKA 1910
ALASKA 1920
ALASKA 1929
ALASKA 1939
ALASKA 1950
ALASKA 1960
ALASKA 1970
UNITED STATES 1960
UNITED STATES 1970
Male
Female
Age
Percent

PROJECTED POPULATION GROWTH: 1978–1985

Between 1970 and 1978, total employment increased by nearly 10 percent per year in Alaska. Over this same period of pipeline stimulated growth, population is estimated to have grown by slightly less than five percent per year. At present the economic growth of Alaska is primarily absorbed in taking up slack left by completion of the trans-Alaska Pipeline. Presumably, population growth fueled by economic expansion is also in a lull. Over the seven years between 1978 and 1985, a reasonable population growth rate would be four percent per year (see Figure 3). However, higher growth rates may occur if major construction projects are undertaken in the state.

FIGURE 3

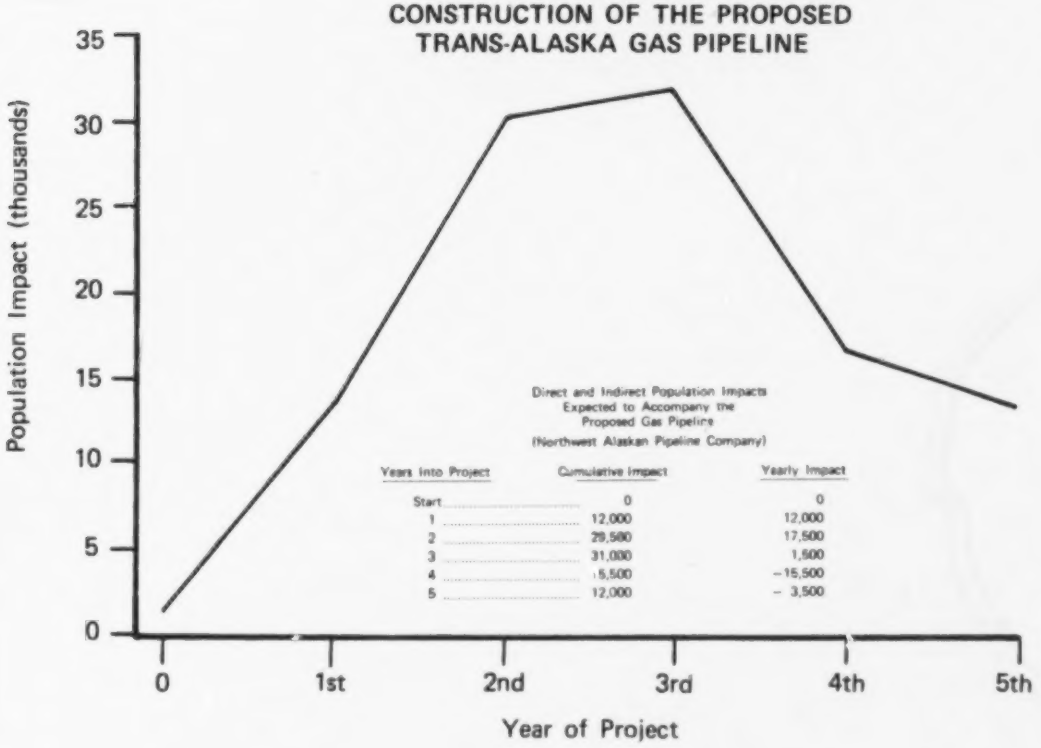
YEAR	POPULATION	
1970	302,361	(Census)
1971	313,100	(Estimate)
1972	315,300	"
1973	330,400	"
1974	351,200	"
1975	404,600	"
1976	413,300	"
1977	411,200	"
1978	416,400	"
1979	426,900	(Projection)
1980	440,500	"
1981	456,400	"
1982	472,900	"
1983	490,600	"
1984	509,700	"
1985	528,500	"



Forecasts of accelerated population growth due to construction of the proposed Northwest Alaskan gas pipeline have been estimated using the Department of Labor's econometric model. The gas pipeline faces many financial, regulatory, and right-of-way hurdles similar to those encountered by the construction of the trans-Alaska Oil Pipeline. Estimates of annual increases in the population (induced by the gas pipeline project) were assumed to peak in the third year of construction with an additional 33,400 people[1/] (see Figure 4).

FIGURE 4

POPULATION INCREASE DUE TO CONSTRUCTION OF THE PROPOSED TRANS-ALASKA GAS PIPELINE



Direct and Indirect Population Impacts Expected to Accompany the Proposed Gas Pipeline (Northwest Alaskan Pipeline Company)

Years Into Project	Cumulative Impact	Yearly Impact
Start	0	0
1	12,000	12,000
2	29,500	17,500
3	31,000	1,500
4	15,500	−15,500
5	12,000	− 3,500

Peak construction employment levels associated with the building of a new capital city[2/] would probably be dwarfed by employment figures when compared to the completed trans-Alaska Pipeline by a factor of 15 to 1. Although population impacts to Willow and Anchorage would be significant, these would be minimal from a statewide perspective. Impacts due to the potential capital move are forecasted to be well within the range of error associated with the base case projections. For this reason, results from the capital move simulation have not been included in this publication.

1/ Alaska Economic Outlook to 1985, Alaska Department of Labor, Research & Analysis Section, Juneau, Alaska, July 1978, pp. 36.

2/ Ibid.

GEOGRAPHIC AREAS

ALASKA'S SUBSTATE AREAS DEFINED

The U.S. Bureau of Census conducts a census of the United States every 10 years. Two decennial censuses (1960 and 1970) have been conducted since Alaska attained statehood in 1959. Both of these were carried out using different substate area schemes. The 1980 census will be based upon yet another set of substate areas. On the negative side, these area changes create confusion and reduce comparability of sub-state data from one census to another. On the positive side, however, these changes draw us nearer to a set of more meaningful areas which will conform more closely with political, social, and economic boundaries.

How do these three graphic area concepts of Alaska compare? The 24 election districts established in Alaska's Constitution served as county equivalents in the 1960 census. Five of these 24 election districts were later split in two, basically yielding the 29 divisions used in the census of 1970. These divisions are still in use today by federal and state government for labor force statistics and other economic data. When the 1980 census results are released, the 29 census *divisions* of 1970 will yield to 23 census *areas*. Of the 23 new census areas, eleven will cover original 1970 census division boundaries. Unlike the 1970 census divisions, certain 1980 census areas are divided into *sub-areas* (ten of the 1980 census areas are subdivided into 22 sub-areas).

The 1980 census areas were established by the co-operative efforts of the U.S. Census Bureau and the Alaska Census Committee.3/ Census area boundaries were delineated on the basis of the following major points:

- Organized boroughs treated as county equivalents.
- Boundaries in the unorganized areas of the state correspond to Native Corporation boundaries and/or Rural Education Attendance Areas.
- Selected census divisions of small geographic areas were combined to form larger census areas in order to create more meaningful statistical units.
- Previous census divisions maintained where possible.
- Sub-areas established for statistical continuity.

3/ The 1980 Census Committee was organized in 1977 with Lee McAnerny, Commissioner, Alaska Department of Community and Regional Affairs as chairperson and included members of various interested state agencies in liaison with the Census Bureau in suggesting input, resolving problems and assisting in operations related to the 1980 census of Alaska.

FIGURE 5

CENSUS DIVISIONS AND ELECTION DISTRICTS*

FIPS Code	Census Division	Original Election District	Old Manual Code
010	Aleutian Islands Division	Aleutian Islands	14
020	Anchorage Division	Anchorage	10
030	Angoon Division	(Part of) Sitka 1/	04
040	Barrow–North Slope Division	Barrow 2/	24
050	Bethel Division	Bethel	16
060	Bristol Bay Borough Division	(Part of) Bristol Bay 3/	15
070	Bristol Bay Division	(Part of) Bristol Bay 3/	15
080	Cordova–McCarthy Division	Cordova–McCarthy	07
090	Fairbanks Division	(Part of) Fairbanks 4/	19
100	Haines Division	(Part of) Lynn Canal–Icy Straits 5/	06
110	Juneau Division	Juneau	05
120	Kenai–Cook Inlet Division	Kenai–Cook Inlet	12
130	Ketchikan Division	(Part of) Ketchikan 6/	02
140	Kobuk Division	Kobuk 2/	25
150	Kodiak Division	Kodiak	13
160	Kuskokwim Division	Kuskokwim	17
170	Matanuska–Susitna Division	Palmer–Wasilla–Talkeetna	09
180	Nome Division	Nome	26
190	Outer Ketchikan Division	(Part of) Ketchikan 6/	02
200	Prince of Wales Division	Prince of Wales	01
210	Seward Division	Seward	11
220	Sitka Division	(Part of) Sitka 1/	04
230	Skagway–Yakutat Division	(Part of) Lynn Canal–Icy Straits 5/	06
240	Southeast Fairbanks Division	(Part of) Fairbanks 4/	19
250	Upper Yukon Division	Upper Yukon 2/	21
260	Valdez–Chitina–Whittier Division	Valdez–Chitina–Whittier	08
270	Wade Hampton Division	Wade Hampton	18
280	Wrangell–Petersburg Division	Wrangell–Petersburg	03
290	Yukon–Koyukuk Division	Yukon–Koyukuk	20

1/ Sitka Census Division + Angoon Census Division = Sitka Election District.

2/ Barrow–North Slope Census Division = Barrow Election District + northern portion of Upper Yukon Election District and northwestern tip of Kobuk Election District.

3/ Bristol Bay Census Division + Bristol Bay Borough Census Division = Bristol Bay Election District.

4/ Fairbanks Census Division + Southeast Fairbanks Census Division = Fairbanks Election District.

5/ Haines Census Division + Skagway–Yakutat Census Division = Lynn Canal–Icy Straits Election District.

6/ Ketchikan Census Division + Outer Ketchikan Census Division = Ketchikan Election District.

*/ Dianne Pressenda, Geographic Area Classification Manual, (Alaska Department of Labor: Research and Analysis Section, 1975), pp. ii.

FIGURE 6

1970 CENSUS DIVISIONS
(Revised 1975)
Barrow–North Slope
Upper Yukon
Kobuk
Nome
Yukon–Koyukuk
Fairbanks
Southeast Fairbanks
Valdez Chitina Whittier
Wade Hampton
Kuskokwim
Matanuska–Susitna
Corclova–McCarthy
Haines
Juneau
Angoon
Bethel
Kenai–Cook Inlet
Bristol Bay
Anchorage
Skagway–Yakutat
Sitka
Seward
Wrangell–Petersburg
Bristol Bay Borough
Prince of Wales
Ketchikan
Kodiak
Outer Ketchikan
Aleutian Islands (part)
Aleutian Islands (part)

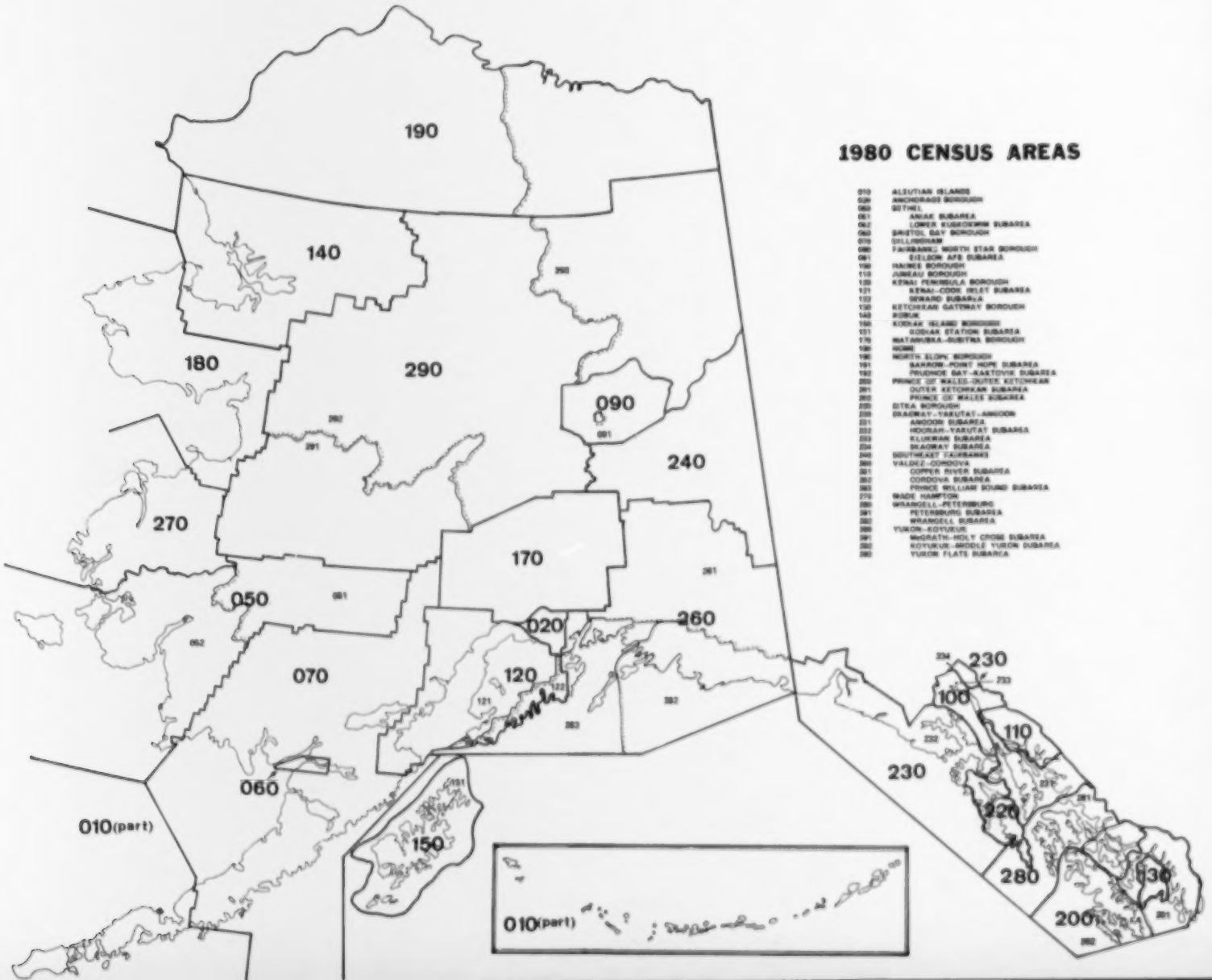
FIGURE 7

THE 1980 CENSUS AREAS AND 1970 CENSUS DIVISIONS

1980 Census Area	Component 1970 Census Divisions
010 Aleutian Islands Area	[01] Aleutian Islands Division (excludes area N.E. of Port Moller).
020 Anchorage Borough	[02] Anchorage Census Division (N.C.)*.
	[03] Angoon Census Division (added to Skagway–Yakutat–Angoon Area 230).
	[04] Barrow–North Slope Census Division (renamed North Slope Borough 185).
050 Bethel Area	[05] Bethel Census Division (includes southern half of [16] Kuskokwim Division).
060 Bristol Bay Borough	[06] Bristol Bay Borough Census Division (N.C.).
070 Dillingham Area	[07] Bristol Bay Census Division (includes Port Moller area from Aleutian Islands Census Division).
	[08] Cordova–McCarthy Census Division (added to Valdez–Cordova Area 260).
090 Fairbanks North Star Borough	[09] Fairbanks Census Division (N.C.).
100 Haines Borough	[10] Haines Census Division (excludes Klukwan).
110 Juneau Borough	[11] Juneau Census Division (N.C.).
120 Kenai Peninsula Borough	[12] Kenai–Cook Inlet Census Division + [21] Seward Census Division.
130 Ketchikan Gateway Borough	[13] Ketchikan Census Division (N.C.).
140 Kobuk Area	[14] Kobuk Census Division (N.C.).
150 Kodiak Island Borough	[15] Kodiak Census Division (N.C.).
	[16] Kuskokwim Census Division (divided between the Bethel Area 050 and the Yukon–Koyukuk Area 290).
170 Matanuska–Susitna Borough	[17] Matanuska–Susitna Census Division (N.C.).
180 Nome Area	[18] Nome Census Division (N.C.).
185 North Slope Borough	[04] Barrow–North Slope Census Division (N.C.).
	[19] Outer Ketchikan Census Division (added to Prince of Wales–Outer Ketchikan Area 200).
200 Prince of Wales–Outer Ketchikan Area	[20] Prince of Wales Census Division + [19] Outer Ketchikan Census Division.
	[21] Seward Census Division (added to Kenai Peninsula Borough 120).
220 Sitka Borough	[22] Sitka Census Division (excludes Port Alexander).
230 Skagway–Yakutat–Angoon Area	[23] Skagway–Yakutat Census Division + [3] Angoon Census Division + Klukwan.
240 Southeast Fairbanks Area	[24] Southeast Fairbanks Census Division (includes Eagle Area, excludes southern portion around Nebesna).
	[25] Upper Yukon Census Division (added to Yukon–Koyukuk Area 290).
260 Valdez–Cordova Area	[26] Valdez–Chitina–Whittier Census Division + [8] Cordova–McCarthy Census Division + Nabesna Area.
270 Wade Hampton Area	[27] Wade Hampton Census Division (N.C.).
280 Wrangell–Petersburg Area	[28] Wrangell–Petersburg Census Division (includes Port Alexander).
290 Yukon–Koyukuk Area	[29] Yukon Koyukuk Census Division + [25] Upper Yukon Census Division (less Eagle area) + Northern half of [16] Kuskokwim Census Division.

(N.C.) = No change

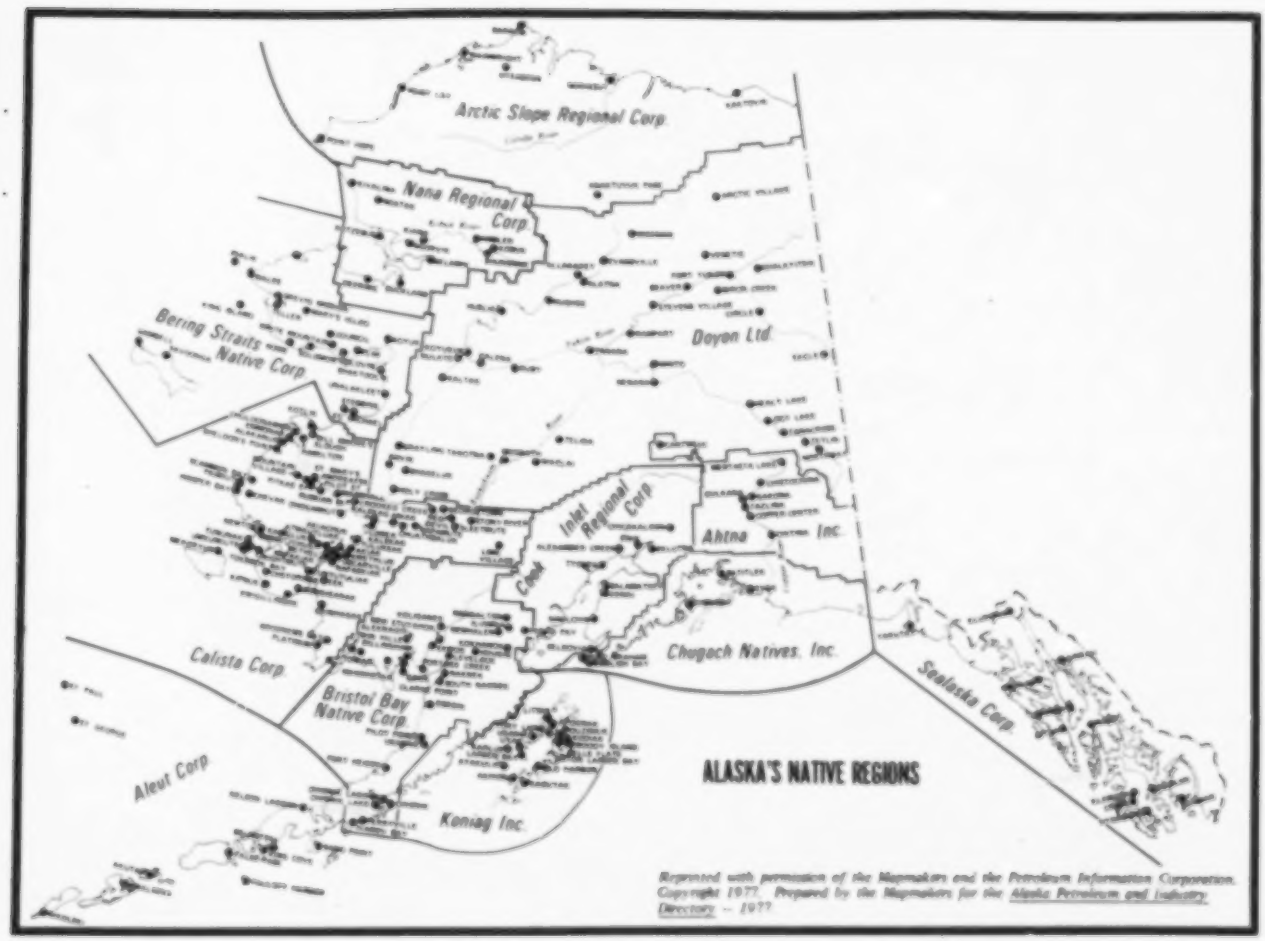
FIGURE 8


1980 CENSUS AREAS
190
140
180
290
090
240
270
170
050
020
260
070
120
100
230
110
060
010(part)
150
220
280
130
200
010(part)

ALASKA'S NATIVE REGIONS

The Alaska Native Regions Map (Figure 9) shows the boundaries of all native regional corporations except the thirteenth corporation which was organized for the benefit of Alaska Natives no longer living in Alaska. According to Wallace Olsen, professor of anthropology at the University of Alaska, the present configuration of boundaries for the 12 in-state corporations was established by overlaying linguistic and cultural maps; and, to a lesser extent, by considering geographic features of Alaska.

FIGURE 9



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CURRENT POPULATION ESTIMATES

INTRODUCTION

The Current Population Estimates section deals with the number of people in various locations around the state. Included in this section are 1978 population estimates for the state, census divisions, and municipalities of Alaska. The section has four parts. The first part presents problems associated with defining 'Alaska resident' and discusses how various definitions of 'resident' may have affected estimates of Alaska population levels – particularly during the turbulent pipeline years. The second portion compares historical population growth rates of Alaska to comparable rates nationwide to see whether estimated current growth rates make sense from an historical perspective. The third part of this section is an analysis of estimated population growth registered by individual census divisions since the 1970 census. Rapid growth appears to be linked to commercial petroleum development, and moderate growth seems to be associated with areas which are reliant upon renewable resource industries. In the final portion, various estimates for Alaska's 151 municipalities are presented and discussed, with special emphasis placed upon a comparison between the state and the federal revenue sharing estimates.

RESIDENTS OF ALASKA

Confusion as to the definition of 'Alaska resident' often muddies discussions concerning past and future changes of the population size. The following quotation describes two alternative definitions in use throughout the world:

> "In general, however, modern censuses are designed to include the 'total population' of an area. This concept is not so simple as it may first appear. *There are two ideal types of total population counts* (emphasis added), *the de facto and de jure.* The former comprises all the people in a given area at a given time. The latter is more ambiguous. It comprises all the people who belong to a given area at a given time by virtue of legal residence, usual residence, or some similar criterion".4/

Migration is a significant demographic factor in Alaska not only because the number of migrants is unusually large, but also because the population base is unusually small. Obviously the migration of 100 persons would have more impact to a small state than to a large state. If the entire population of Alaska were to be added to the population of the most populous state (California), the larger state's population would rise less than 2 percent. Where migration is a significant factor, measurements of population levels and growth depend, to some extent, upon the conventions which define residency.

'Usual Residence' is the concept used in the U.S. to define the population of an area. 'Usual residence' is ordinarily the place a persons regards as his home. As a rule it will be the place where he usually sleeps5/ This simple convention, however, must be qualified in order to avoid double counting. High school students living at school, for instance,

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4/ U.S. Bureau of the Census, The Methods and Materials of Demography, Shyrock, Siegel, and Associates, U.S. Government Printing Office, Washington, D.C. 1975 pp. 92.

5/ U.S. Bureau of the Census, Enumerators Reference Manual: 1960 Census of Population and Housing, F-210, 1959, pp. 5-7.

are counted at the home of their parents; whereas college students are counted where they live. Many persons who consider themselves Alaskans are "persons with more than one residence"; some are "persons with no residence"; and still others are "persons who work and live away from their homes and families". Cities in Alaska which provide hospital facilities and other services to seasonal workers tend to include these seasonal workers for revenue sharing purposes; however, the Census Bureau specifies these persons be counted where they spend most of the year.

> "Of course, there have long been classes of workers who changed their residence seasonally with the jobs – lumbermen, fishermen, agricultural workers, canners, etc. In the cases that involve an annual cycle, the ordinary rule is to choose the residence where the person lives the greatest part of the year – although there is always the temptation to play safe and count him where you find him".6/

DEPARTMENT OF LABOR POPULATION ESTIMATES

The problem of estimating population in Alaska has been particularly complicated by social and economic changes associated with construction of the Trans-Alaska Pipeline. Migration associated with construction and operation activities added a new dimension to the difficulties of defining "Alaska Resident". Interstate seasonal movements of many construction workers, fishermen, and loggers also tend to blurr the distinction between those who are residents and those who are not.

During the ten year span between censuses, changes in the population level are tracked by monitoring the behavior of certain indicator data series. Department of Labor population estimates for Alaska did not rise as rapidly as suggested by the climbing employment data during build-up of the pipeline work force. Employment growth was greater than population growth, it was urged, because many of those holding pipeline induced jobs were *non-residents*. This conservative approach in Labor Department population estimates registered basic changes in the population of permanent residents but ignored waves of pipeline boomers.

The 1978 Department of Labor resident population estimate shows a slight (1.25 percent) growth over the 1977 figure. Short term migrants drawn by the pipeline boom have been leaving Alaska. This exodus will not show up as a decline in the resident population figure though because many of these temporary workers were not added to the resident estimate as they arrived. The military population of Alaska has also been in gradual decline. Expansion due to the continuing infusion of petroleum dollars into the state's economy and the assimilation of a number of "temporary" inmigrants contributed to the slight overall growth registered.

6/ U.S. Bureau of the Census, The Methods and Materials of Demography, Shyrock, Siegel, and Associates, U.S. Government Printing Office, Washington, D.C., 1975, pp. 96.

Alaska by 1978 was well into establishing a new population equilibrium. The Trans-Alaska Pipeline had begun commercial operation on July 10, 1977. Remaining pipeline construction workers were re-classified as maintenance and operations workers in the transportation industry. Rather than basing the 1978 population estimates solely upon changes from the 1977 estimates (which were produced during a turbulent boom period), the net changes occurring over the entire interval since the 1970 census were also examined. The net changes observed between 1970 and 1978 were viewed as permanent growth remaining after the boom.

FIGURE 10

TOTAL RESIDENT POPULATION OF ALASKA CENSUS DIVISIONS, JULY 1, 1978 - Alaska Department of Labor

CENSUS DIVISION	1978 ESTIMATE	1970 CENSUS	NET CHANGE 1970-1978 NUMBER	NET CHANGE 1970-1978 PERCENT	COMPONENTS OF CHANGE 1970-1978 BIRTHS	DEATHS	NET CIVILIAN MIGRATION
ALEUTIAN ISLANDS	8000	8057	-57	-1	1106	176	1047
ANCHORAGE	185500	126333	59167	47	28054	4193	37274
ANGOON	600	503	97	19	96	54	51
BARROW-NORTH SLOPE	8300	3451	4849	141	566	164	4536
BETHEL	10000	7767	2233	29	1804	362	871
BRISTOL BAY BOROUGH	1400	1147	253	22	121	39	-139
BRISTOL BAY	3900	3485	415	12	672	196	378
CORDOVA-MCCARTHY	2400	1857	543	29	281	129	377
FAIRBANKS	55500	45864	9636	21	10356	1467	4404
HAINES	1500	1504	-4	0	240	95	-119
JUNEAU	19500	13556	5944	44	2332	686	4219
KENAI-COOK INLET	22300	14250	8050	56	2765	542	6259
KETCHIKAN	12600	10041	2559	25	1796	609	1501
KOBUK	5300	4048	1252	31	1045	227	523
KODIAK	9600	9409	191	2	1909	391	-733
KUSKOKWIM	2700	2306	394	17	427	155	322
MATANUSKA-SUSITNA	15400	6509	8891	137	1553	462	7648
NOME	7200	5749	1451	25	1312	435	683
OUTER KETCHIKAN	2000	1676	324	19	327	102	99
PRINCE OF WALES	2600	2106	494	23	286	107	315
SEWARD	3100	2336	764	33	413	204	646
SITKA	7200	6109	1091	18	1057	293	281
SKAGWAY-YAKUTAT	2800	2157	643	30	406	145	355
SOUTHEAST FAIRBANKS	5300	4179	1121	27	908	124	-460
UPPER YUKON	1200	1282	-82	-6	287	104	-189
VALDEZ-CHITINA-WHITTIER	5000	3098	1902	61	725	187	1317
WADE HAMPTON	4400	3917	483	12	996	177	-182
WRANGELL-PETERSBURG	5600	4913	687	14	947	333	110
YUKON-KOYUKUK	5500	4752	748	16	790	260	410
TOTAL	416400	302361	114039		63577	12418	71805

* NOTE: THE 1978 POPULATION DISTRIBUTION BY AREA WAS DEVELOPED USING A NEW METHODOLOGY. FOR THIS REASON, THE 1978 LEVELS ARE NOT COMPARABLE TO PRIOR YEARS ESTIMATES AND SHOULD NOT BE USED FOR TREND ANALYSIS.

STATEWIDE POPULATION GROWTH

The population of the state of Alaska is estimated to have grown 37 percent in the eight years since 1970. Six census Divisions (comprising roughly 61 percent of the Alaska population) had growth rates exceeding the statewide average, while the remaining 23 divisions (39 percent of total population) had lesser growth rates.

The Alaska growth rate of 37 percent[7/] compared to the U.S. growth rate of 7 percent shows Alaska growing *five times the U.S. rate* between 1970 and 1978. It is not unusual for Alaska population growth to be substantially higher than that of the U.S. although with an estimated 0.2 percent of the total 1978 U.S. population, the Alaska population is still the smallest in the nation (see Appendix D pp. 49). Between the 1960 and 1970 censuses, the Alaska growth rate was some 2½ times greater than the U.S. rate.[8/] From 1950 to 1960, the Alaska rate of population increase exceeded the U.S. rate by over 4 times; and from 1940 to 1950 the Alaska rate of growth was also above 5 times higher than U.S. growth. Alaska's small population, vast natural wealth, and great geographic area can combine to produce erratic population growth rates several times greater than those of the U.S.

CENSUS DIVISION GROWTH

The growth achieved by Alaska Census Divisions between 1970 and 1978 may be grouped 'high growth', 'moderate growth', and 'low growth'. Surprising similarities emerge when areas with corresponding growth rates are compared. Since the highest and lowest growth rates are separated by 147 percentage points, the difference between growth rates may be significant indeed.

THE EXTREMES

The growth registered during the eight year period following the 1970 census varies widely among census divisions. The most rapidly growing division, Barrow–North Slope – site of Prudhoe Bay oil fields, increased by a phenomenal 141 percent over the eight year interval. The slowest growing census division, Upper Yukon, is estimated to have *declined* by 6 percent since the 1970 census.

The extreme difference in growth rates of Barrow–North Slope and Upper Yukon Divisions require qualification. A large amount of land area was added to the new Barrow–North Slope Division on September 15, 1973[9/] (previously the Barrow Division). This boundary change adds to the growth statistic slightly. Therefore the 1970 population of the smaller Barrow Division is not directly comparable to the 1978 population of the larger Barrow–North Slope census division. When the area of fastest growing Barrow–North Slope was increased (due to boundary changes); the area of slowest growing Upper Yukon was significantly reduced. This could explain part of the population decline of the Upper Yukon Division.

7/ The U.S. Bureau of the Census 1978 estimate for Alaska is 403,000 (33% growth 1970–1978).

8/ U.S. Bureau of the Census Statistical Abstract of the United States: 1978 (99th edition), Washington, D.C., 1978. pp. 12.

9/ The census division boundaries were revised in recognition of the incorporation of the North Slope Borough, July 1, 1972.

The presence of the Prudhoe Bay industrial area and the construction of the Trans-Alaska Pipeline have fueled the phenomenal growth of this regional center. However the accuracy of this estimate has been called into question over disagreement concerning the 'residency' of some 3,000 petroleum workers in the Prudhoe Bay industrial area who work on a week on, week off' basis. For purposes of the 1978 Department of Labor population estimates, these workers were assumed to be living without dependents in the Barrow–North Slope census division. This assumption is based upon similar treatment of these workers in the North Slope Borough 1978 population estimate. Recent information suggests, however, that these workers should have been counted as residents of Anchorage, Fairbanks, and even as residents of other states. Without inclusion of these 3,000 workers, the growth of the Barrow–North Slope Division would have been 54 percent, making it the fifth fastest growing division rather than the first. The combination of a boundary change, petroleum development, and the questionable counting of rotating oil workers as North Slope residents have all contributed to the elevated growth rate of the Barrow–North Slope Division.

High Growth Areas

The seven most rapidly growing census divisions between 1970 and 1978 all receive direct or indirect stimulus from development of Alaska's petroleum resource. The top growing Barrow–North Slope Division is origin of all oil now flowing through the Trans-Alaska Pipeline. The second most rapidly increasing census division, Matanuska–Susitna, has picked up a great deal of overflow growth from the expanding Anchorage Division. There is evidence, however, that the forces which fueled the spectacular 137 percent growth of Matanuska–Susitna are now weakening. As terminus of the Trans-Alaska Pipeline, the Valdez–Chitina–Whittier Division ranks third in growth between 1970 and 1978. Construction of the pipeline, tank farm, and Port of Valdez have contributed heavily to the economy of this area and are largely responsible for the 61 percent growth experienced between 1970 and 1978. Kenai–Cook Inlet and Seward are adjacent census divisions with similar oil spurred growth rates. Though Anchorage produces no oil, benefits of oil development are derived through the Anchorage role in providing industrial support to petroleum activities elsewhere. Many residents of the Kenai–Cook Inlet census division are involved with operation of oil wells in Cook Inlet, refinement of oil, and the manufacture of urea fertilizer from natural gas. Kenai–Cook Inlet has grown an estimated 56 percent since 1970. Juneau, Alaska's capital, ranks sixth among high growth areas of Alaska. Far removed from the producing oil fields, Juneau and other census divisions benefit in several ways from petroleum and other activity within the state of Alaska. Alaska oil development has played a key role in bringing about the abnormally high growth rates of the top seven high growth areas between 1970 and 1978. Unless a gas pipeline is constructed, the high growth of oil producing regions will probably moderate.

Medium Growth Areas

Eighteen of the 29 Alaska census divisions grew more rapidly than the U.S. population (7 percent) but slower than the statewide figure (37 percent) during the period 1970–1978 (see Figure 11). Certain patterns are evident in the growth of these divisions. First, *oil is not extracted or refined commercially* in any of these medium growth areas. The renewable resource industries, fishing and forestry, are prevalent in the middle growth divisions. These are seasonal industries and the populations which rely upon them are sensitive to government regulation of allowable harvest as well as seasonal and cyclical variations. The success of the fishing industry varies from year to year and from month

to month depending upon the size and location of harvestable fish stocks. In areas where fishing is the predominant industry, growth from year to year may be sporatic.

The logging and lumber industries are predominant among causes of growth in four of the medium growth census divisions. Since loggers often live in camps which move from one work site to another, populations of loggers may be stable in number from year to year but at the same time might not remain in a given location from year to year. Logging activity is subject to peculiarities of forest practices and environmental restrictions.

Much employment and population growth in the moderate growth areas seems to be fueled by exploitation of renewable resources. Although access to supplies of raw materials is subject to some uncertainty, and transportation costs and demand for output may fluctuate, these areas will probably sustain their current rate of growth.

FIGURE 11

ALASKA CENSUS DIVISIONS RANKED BY POPULATION GROWTH 1970–1978

Rank by Growth	Percent Growth 1970–1978	1978 Population*	Census Division (Or Area)
1	141%	8,300	BARROW–NORTH SLOPE
2	137%	15,400	MATANUSKA–SUSITNA
3	61%	5,000	VALDEZ–CHITINA–WHITTIER
4	56%	22,300	KENAI–COOK INLET
5	47%	185,500	ANCHORAGE
6	44%	19,500	JUNEAU
AK.	37%	416,400	(STATE OF ALASKA)
7	33%	3,100	SEWARD
8	31%	5,300	KOBUK
9	30%	2,800	SKAGWAY–YAKUTAT
10	29%	10,000	BETHEL
11	29%	2,400	CORDOVA–McCARTHY
12	27%	5,300	SOUTHEAST FAIRBANKS
13	25%	12,600	KETCHIKAN
14	25%	7,200	NOME
15	23%	2,600	PRINCE OF WALES
16	22%	1,400	BRISTOL BAY BOROUGH
17	21%	55,500	FAIRBANKS
18	19%	2,000	OUTER KETCHIKAN
19	19%	600	ANGOON
20	18%	7,200	SITKA
21	17%	2,700	KUSKOKWIM
22	16%	5,500	YUKON–KOYUKUK
23	14%	5,600	WRANGELL–PETERSBURG
24	12%	3,900	BRISTOL BAY
25	12%	4,400	WADE HAMPTON
U.S.	7%	218,058,000	(UNITED STATES**)
26	2%	9,600	KODIAK
27	0%	1,500	HAINES
28	–1%	8,000	ALEUTIAN ISLANDS
29	–6%	1,200	UPPER YUKON

* Alaska Department of Labor Population Estimates

** Bureau of the Census, Department of Commerce

Low Growth Areas

Four of Alaska's 29 census divisions expanded at a rate less than the U.S. average between 1970 and 1978. Loss of military personnel (which comprised a substantial proportion of the 1970 population) is the primary cause of decline in the Kodiak Division and the

Aleutian Islands Division. In Haines, inadequate stumpage sales have prevented operation of a saw mill which was a prime employer in that area. The resultant loss of jobs had depressed the economic and the population growth of Haines. As previously mentioned, the Upper Yukon Division lost area to the Barrow–North Slope Division in 1973. The fact that a portion of the Trans-Alaska Pipeline was constructed through Upper Yukon Division does not seem to have spurred much growth in this census division which dropped 6 percent over eight years. This is due to the transitory nature of the construction jobs. In three of four low growth areas, military and economic decline have been significant factors in the loss of population.

CURRENT ESTIMATES FOR MUNICIPALITIES

Population estimates for the 151[10/] Alaska Municipalities are maintained by three agencies. Federal Revenue sharing population estimates are prepared by the U.S. Bureau of the Census. State Revenue Sharing estimates are based upon the 1970 census. A relatively convenient procedure exists whereby individual municipalities may challenge their current state Revenue Sharing population estimate by demonstrating to the Alaska Department of Community and Regional Affairs that the size of their population is understated. The state estimates tend to be higher than the federal estimates for three reasons: 1) Increases to the federal estimates are recognized by Community and Regional Affairs, however state increases are not recognized by the Census Bureau; 2) the cost and complication of communication with Washington, D.C. plus the dearth of municipality generated statistics makes it difficult to challenge a federal estimate; and 3) the State Revenue Sharing Program lacks a mechanism for reducing an estimate during a population decline (as has happened in Fairbanks since the pipeline boom).

The third agency which maintains population statistics by municipality is the Alaska Department of Health and Social Services. An offshoot of the biennial 'Village Nurse Census', a population count is made as a part of the general set of information kept on each village which the nurses visit on their tour.

A comparison of population estimates is provided in Appendix B page 40 . This population data is organized alphabetically by municipality within census divisions. Figures included are from (1) the 1970 census figures,(2) 1975 and 1976 Bureau of Census estimates,(3) 1977–78 Village Nurse Census, and(4) the July 1, 1978 State Revenue Sharing estimates. Also included (for census divisions only) are the 1978 Alaska Department of Labor estimates and the 1978 Bureau of the Census revised estimates.

10/ Includes Metlakatla – incorporated under Federal Law in 1944.

AGE/SEX BY AREA: 1970

CENSUS DIVISION POPULATION PROFILES

In the historical section of this publication, changes of the Alaska age/sex profile were traced through time. In this section, profiles of the 29 Alaska Census Divisions are displayed and four exceptional profiles are discussed to indicate how these profiles may be interpreted.[11/]

Historical Alaska population pyramids relate population age-sex characteristics to different dates in time, and census division pyramids bear information concerning the distinctive features of the various census divisions in Alaska.

1. The most notable feature of the 1970 *Aleutian Islands* profile is roughly 30 percent of the total population was comprised of males between the ages of 20 and 24 years. A high percentage of males in this age group usually indicates a significant *military population.*

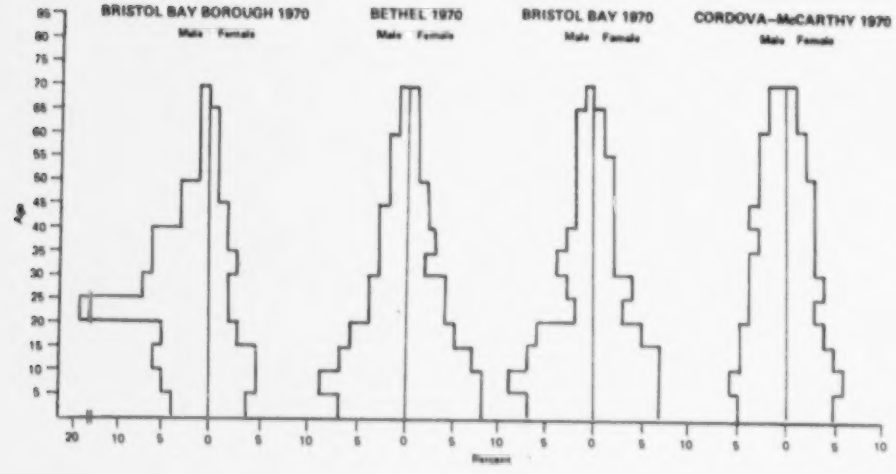
2. A population drop-off above 20 years of age is pronounced in the *Angoon* profile. A drop-off such as this may often be attributed to *out-migration of young adults* from rural areas. The narrow base of the Angoon profile is characteristic of the *passing influence of the Post World War II baby boom.*

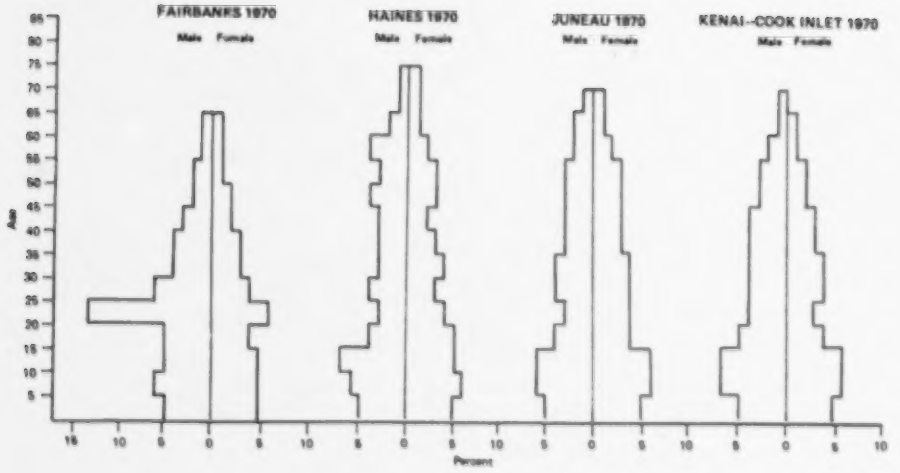
3. In the *Fairbanks* pyramid, two features overlap in the 20–24 age bracket. A population of *college students* elevates the levels of both males and females in the 20–24 year age bracket. However, *military personnel* stationed in Fairbanks mask the presence of male college students in Fairbanks.

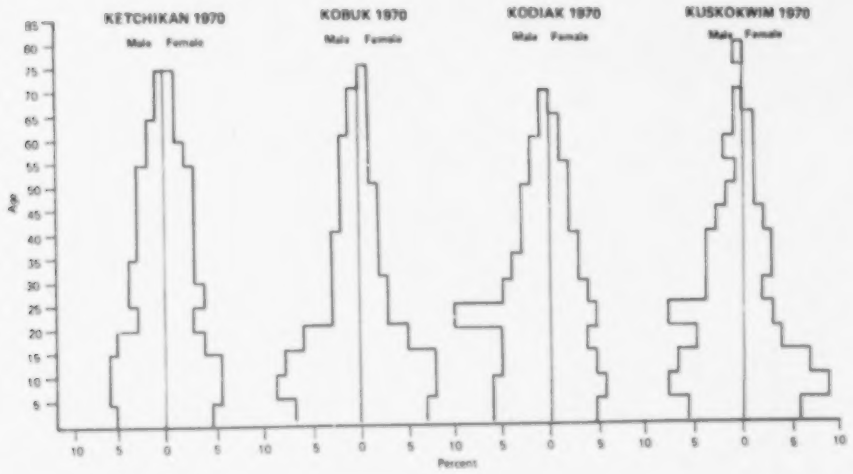
4. Three major influences may be responsible for the peculiar shape of the Matanuska–Susitna profile of 1970: a) *the end of the Post World War II baby boom* may have reduced the number of children born in Matanuska–Susitna; b) the relatively low population of the 20-30 year cohort may reflect *out-migration of young adults* from a community which was primarily of a rural and agricultural orientation; and c) the relatively high proportion of persons 35 to 59 years of age may reflect an increasing role of the Matanuska–Susitna valley as the bedroom community of Alaska's most populous city, Anchorage.

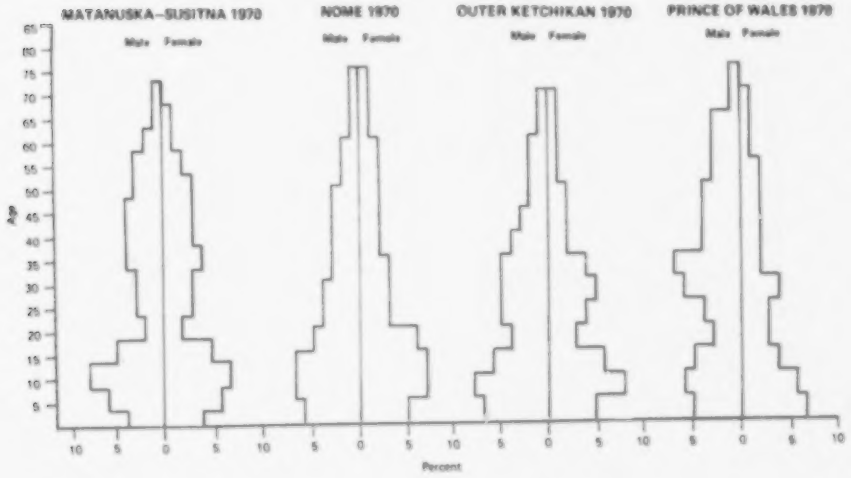
11/ The layout of age/sex profiles were described in the historical section of this publication (see Population Pyramids: How to Read Them pp. 9).

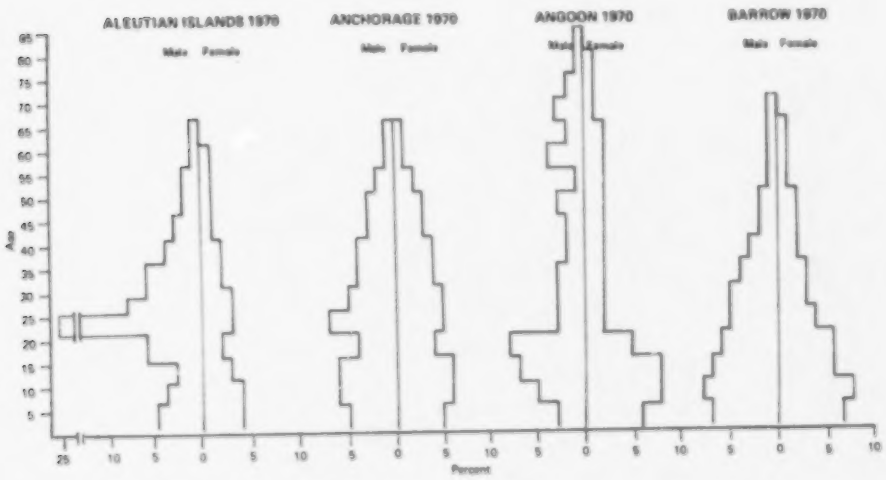
FIGURE 12

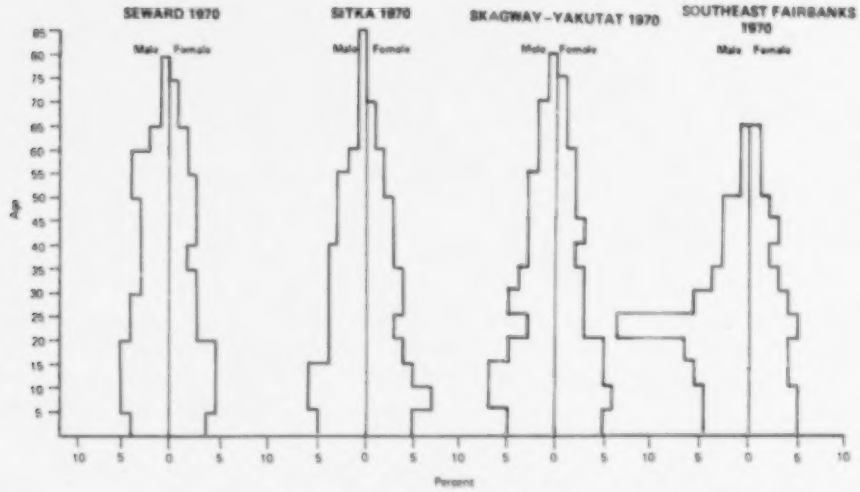

BRISTOL BAY BOROUGH 1970
BETHEL 1970
BRISTOL BAY 1970
CORDOVA–McCARTHY 1970
Male Female
Age
Percent

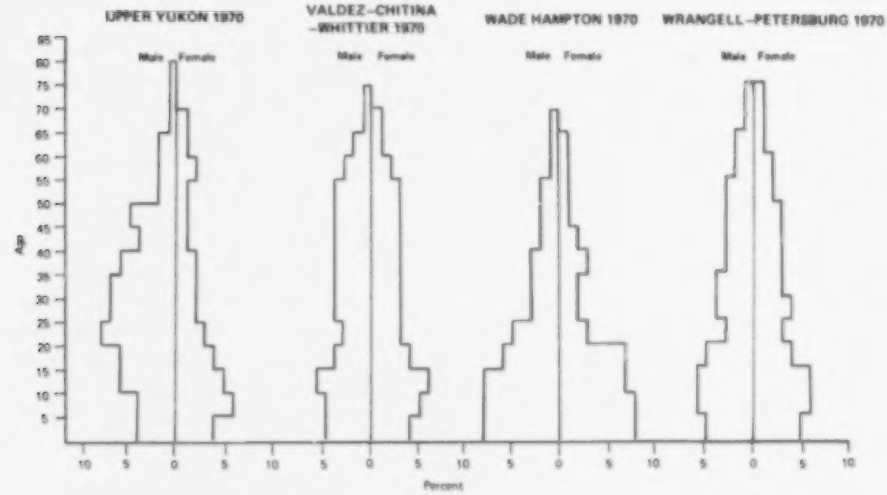

FAIRBANKS 1970
HAINES 1970
JUNEAU 1970
KENAI–COOK INLET 1970
Male Female
Age
Percent

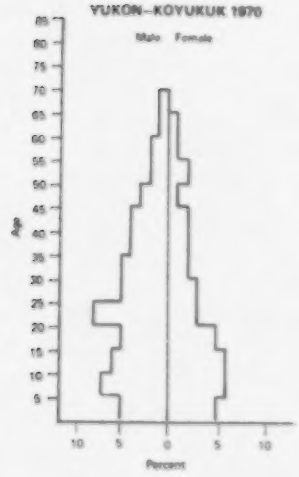

KETCHIKAN 1970
KOBUK 1970
KODIAK 1970
KUSKOKWIM 1970
Male Female
Age
Percent


MATANUSKA-SUSITNA 1970
NOME 1970
OUTER KETCHIKAN 1970
PRINCE OF WALES 1970
Male Female
Age
Percent


ALEUTIAN ISLANDS 1970
ANCHORAGE 1970
ANGOON 1970
BARROW 1970
Male Female
Age
Percent


SEWARD 1970
SITKA 1970
SKAGWAY-YAKUTAT 1970
SOUTHEAST FAIRBANKS 1970
Male Female
Age
Percent


UPPER YUKON 1970
VALDEZ-CHITINA -WHITTIER 1970
WADE HAMPTON 1970
WRANGELL-PETERSBURG 1970
Male Female
Age
Percent


YUKON-KOYUKUK 1970
Male Female
Age
Percent

SINGLE YEARS OF AGE BY RACE AND SEX

For those wishing a more detailed view of the age by race-sex structures of the 1970 Alaska population, a table from the Census Publication General Population Characteristics of Alaska has been reprinted in the appendix of this publication. This table delineates the number of persons in one year age groups (cohorts) by sex within the racial groupings white, black, and other (see Appendix C, page 48).

MIGRATION

In previous sections, changes in Alaska's population size, racial composition, and age/sex profile are discussed briefly. When the size or racial composition of a population changes, these changes may be traced to births, deaths, or migration (in the case of an age/sex profile, aging is a key factor). The last factor, migration, is the subject of the present section.

Responses from the 1970 census question,[12/] "Where was this person five years ago?" reveals the significance of migration in Alaska. *Net* migration (persons entering minus persons leaving) comprised nearly one half of the population growth occurring between 1965 and 1970. However, that is only the tip of the iceberg. Approximately 120,000 individuals moved to Alaska between the years 1965 and 1970; yet, almost 100,000 Alaskans left the state over that same period. Thus for every six individuals who moved to Alaska, five individuals left the state.

Nearly 40 percent of the 1970 residents of Alaska had been living outside the state 5 years previous. Since Alaska's population is estimated to be the smallest in the union, numerical changes which might go un-noticed in larger states may be striking statistics in the 49th state. Historically, migration has served as principal avenue of population change in Alaska. It has been pointed out previously that significant changes in the balance (or imbalance) between the number of males and females are usually caused by migration in Alaska. Large fluctuations in the racial composition of Alaska are principally fueled by migration, and much of the distortion of Alaska's age profile is explained by migration.

The characteristics of migrants to and from Alaska are influenced by the characteristics of the Alaska population and by population characteristics of states from which most of the migrants originate. Between 1965 and 1970, more males (58 percent) migrated to Alaska than females (42 percent). Taking outmigration into consideration, males claimed an even greater share of growth due to net migration (68 percent). Figure 13 displays the characteristics of Alaska inmigrants and *net* migrants at the 1970 census. In the lower portion of this table, it is shown that 84 percent of Alaska growth due to migration is concentrated in the 20–24 age bracket, and that a *net loss* of 12 percent occurred in the 45–64 age group.

12/ "Where was this person five years ago?" asked of a 15 percent sample of 1970 census respondents.

FIGURE 13

GROSS MIGRATION BY SELECTED CHARACTERISTICS: ALASKA* 1965–1970**

Characteristics	Group	Percent of In Migrants	Percent of Net Migration
SEX			
	MALE	58%	68%
	FEMALE	42%	32%
	TOTAL	100%	100%
RACE			
	WHITE	92%	97%
	BLACK	4%	3%
	TOTAL	96%	100%
AGE			
	UNDER 15 YEARS	24%	10%
	15–19 YEARS	8%	5%
	20–24 YEARS	22%	84%
	25–29 YEARS	15%	5%
	30–44 YEARS	23%	16%
	45–64 YEARS	7%	–12%
	65 YEARS AND OVER	1%	– 8%
	TOTAL	100%	100%

* 'Other' not included.

** Based upon data from: U. S. Bureau of the Census, Current Population Reports Series P25, No. 70, "Gross Migration by County: 1965 to 1970" pp9, U. S. Government Printing Office, Washington, D. C., 1977.

Alaska population growth throughout the 1960's was moderate when compared to the oil spurred growth of the 1970's. It is likely that in-, out-, and net-migration rates from the 1970 census will pale by comparison with the results of the upcoming 1980 census.

RACE

Racial data for Alaska and other states is usually published by the groups 'white', 'black', and 'other'. According to 1970 census data, blacks comprised roughly 3 percent of the Alaska population and Alaska Natives roughly 17 percent. Figure 14, "Race of the Population by Census Division – 1970," displays the 1970 population of the largest racial groups in Alaska. Alaska Natives are further subdivided into Eskimo, American Indian, and Aleut. Since Alaska Natives are by far the largest minority group in Alaska, they are the primary subject of this section.

Alaska Natives comprised about 50 percent of the population in 1900 (approximately 33,000 Natives). By 1970 the Native population had grown 53 percent to 50,700 – an increase of 0.8 percent per year. The general population, however, had grown

approximiately 370 percent over the 70 year period, amounting to more than 5 percent per year. The general population has been growing 5 times faster than the native population with the result that the Native proportion of the Alaska population had declined to 17 percent by 1970.

Twenty-two separate and distinct languages are in use among Alaska Natives today.[13/] In Alaska, Eskimos have historically inhabited northern coastal regions; with Indians most often living in the interior and the southeast; and Aleuts residing in the Aleutian Islands and on Kodiak[14/] – although many members of these groups may have relocated in Anchorage and other urban areas. The three groups are generally united by the heritage of a subsistence lifestyle, powerful ties to the land, and the fact that their ancestors are the earliest known inhabitants of Alaska.

13/ Glen Robertson; personal communications; Public Information Bureau of Indian Affairs, Juneau.

14/ Alaska Natives and the Land; Federal Field Committee for Development Planning in Alaska; Anchorage, Alaska; October 1968; U.S. Government Printing Office; Washington, D.C.; map pp. 5.

RACE OF THE POPULATION BY CENSUS DIVISION, ALASKA: 1970

CENSUS DIVISION	TOTAL ALL RACES	WHITE	NATIVE TOTAL	ESKIMO	INDIAN	ALEUT	BLACK	FILIPINO	JAPANESE	OTHER
TOTAL	300382	236767	50654	27797	16276	6581	8911	1498	916	1636
ALEUTIAN ISLANDS	8057	5564	2063	30	61	1972	237	135	21	37
ANCHORAGE	124542	112965	4795	2282	1775	738	5147	425	471	739
ANGOON	503	114	383	2	371	10	0	4	0	2
BARROW-NORTH SLOPE	2663	330	2313	2302	10	1	14	0	1	5
BETHEL	7579	747	6752	6669	65	18	24	24	4	28
BRISTOL BAY BOROUGH	1147	922	186	35	20	131	31	0	1	7
BRISTOL BAY	3485	671	2763	1656	272	835	5	14	13	19
CORDOVA-MCCARTHY	1857	1529	284	12	49	223	2	35	3	4
FAIRBANKS	45864	40933	1876	802	1020	54	2580	45	107	323
HAINES	1504	1175	322	3	315	4	0	0	1	6
JUNEAU	13556	11422	1657	110	1477	70	106	283	27	61
KENAI-COOK INLET	14250	13047	963	103	478	382	105	81	20	34
KETCHIKAN	10041	8527	1260	22	1179	59	44	126	30	54
KOBUK	4434	534	3877	3869	8	0	5	0	1	17
KODIAK	9409	7215	1744	56	106	1582	157	183	41	69
KUSKOKWIM	2306	584	1673	924	745	4	35	1	10	3
MATANUSKA-SUSITINA	6509	6189	272	91	138	43	12	1	4	31
NOME	5749	1205	4471	4448	19	4	27	0	16	30
OUTER KETCHIKAN	1676	757	870	37	820	13	5	11	15	18
PRINCE OF WALES	2106	1497	587	12	567	8	6	1	0	15
SEWARD	2336	2067	246	101	56	89	4	12	4	3
SITKA	6109	4611	1341	83	1169	89	36	53	40	28
SKAGWAY-YAKUTAT	2157	1338	796	30	752	14	0	8	5	10
SOUTHEAST FAIRBANKS	4179	3418	503	20	479	4	208	15	13	22
UPPER YUKON	1684	588	1077	163	907	7	13	1	2	3
VALDEZ-CHITINA-WHITTIER	3098	2378	701	110	413	178	9	0	3	7
WADE HAMPTON	3917	231	3671	3650	17	4	12	0	0	3
WRANGELL-PETERSBURG	4913	3759	1032	15	975	42	4	35	60	23
YUKON-KOYUKUK	4752	2450	2176	160	2013	3	83	5	3	35

FIGURE 14

APPENDIX A

METHODOLOGY

Introduction

The number of people in a given area is one of the most relevant statistics available. Population is the basis of all per capita rates: death, income, alcoholism, labor force participation, unemployment, etc. Population is widely used for resource allocation: state and federal revenue sharing; planning and budgeting, etc; and for studies of many types – policy impact studies, market studies, traffic studies, etc. Owing to the cost and difficulty of performing a complete census, concrete population figures are only available once every ten years.[15/] Yet population information is needed on an annual basis if not more frequently.

Population estimation is less costly than taking a yearly census. Instead of a precise count, an estimate is produced which represents a 'best judgement' as to the current levels of population in the state and its sub-areas. These estimates are based upon the movements of 'indicator data' which are presumed to move in concordance with the number of people in a given area. Common indicators are births, deaths, school enrollment, automobile registrations, number of tax returns/exemptions, number employed/unemployed, private telephone stations, etc.

In Alaska, very little 'good' indicator data exists. The change from election districts to census divisions has precluded the use of a great deal of indicator data – just as the switch to 1980 census areas will make obsolete much data from the 1970's. Many areas of Alaska lack a developed road system – making the automobile registration data *not* universally applicable. In areas with large subsistence populations, tax returns do not reflect the true population size. Employment data must also be used with great care. The beginning or conclusion of CETA or other employment grants, for instance, may significantly alter employment levels in an area. And in the Barrow–North Slope census division 3,000 petroleum workers (36 percent of the official 1978 Barrow–North Slope population estimate) commute more than 300 or even 600 miles to their homes in other areas on a weekly basis.

It should be stressed that the techniques utilized in 1978 are not immutable. New data sources and new techniques are continuously being researched, tested, and refined. Results from the 1980 census will answer many questions and provide a new basis for estimates and projections to be made in the 1980's.

1978 Population Estimates Approach

The 1978 population estimates for Alaska have been developed using a three stage approach. In the first stage, a preliminary Alaska state total estimate is produced. During the second stage, various methods are used to apportion this preliminary state total among the 29 Alaska census divisions. The purpose of the third and final stage is to bring to bear as much information as possible (such as special census results) into the production of a revised set of census division estimates. These estimates are designed to reflect the best and most up-to-date information available concerning each census division.

15/ Congress has mandated a 5 year census be carried out; but as of this writing the 5 year census has not been funded.

Stage 1 Techniques

The primary product of stage one is a 1978 total resident population estimate. This number includes both civilian and military residents of Alaska and carries a definition identical to that used in the 1970 census. The resident population figure which is later divided into census divisions is based upon four estimating techniques. Three of these four methods are based primarily upon changes in the level of Total Non-Agricultural Wage and Salary Employment. The four methods used to produce the total population figure are: Employment Censal Ratio method, 1977–1978 Employment/Population ratio, the Component Method II, and an employment based regression method. Each of the four methods provides a slightly different outlook on Alaska's population size.

1) Employment Censal Ratio Method (1970–1978)

This method is based upon the assumption that the net civilian population growth between 1970 and 1978 has occurred in proportion to net change in employment over that same period. For this method, population changes are assumed to occur at a constant rate per worker. Civilian population data are handled separately because military station strength figures do not seem to respond to local economics, and also because actual counts of military population are available for each base and station.

2) Employment – Population Ratio Method (1977–1978)

This method is much like the preceding method. The difference is that this method is benchmarked to the 1977 Alaska Department of Labor Population estimate, whereas the former estimate is grounded upon the 1970 census count. This method assumes that estimated 1977 population levels are correct and that the ratio of total civilians to workers remained constant between 1977 and 1978. It is assumed that compensating social factors have offset the effects of one another to a large extent.

3) Employment Regression Method

In developing the Regression Method equation, annual Department of Labor population estimates from 1966 to 1977 were regressed with eleven years of employment data to calculate the population multiplier of employment which was then used with 1978 employment data to estimate the population level.

4) Component Method II

The Component Method II was developed by the U.S. Census Bureau. At each ten year census, population is tabulated by one year age groups (i.e. the number of individuals less than one year of age, age one, age two, age three...). Using these age breakdowns, the size of the school age population (ages 6 through 14) is totaled. The 1970 school enrollment figure is divided by the school age population and the proportion of children in school results. For the purpose of making later estimates, this proportion is assumed to remain constant.

Assuming that no deaths or migration occur, the school age population (ages 6 through 14) of 1971 would be composed of the children who were ages 5 through 13 at the time of the 1970 census. Similarly the school age population of 1972 would be comprised of children who were between 4 and 12 years.

The Component Method II measures migration by subtracting the expected school enrollment from the actual school enrollment. If there are more students than expected, then in-migration is inferred and a migration rate is developed using the ratio of school age population to total civilian population. Births are added to the population, deaths are subtracted, and reported military data is used to account for those in uniformed active duty service.

One of the weaknesses of this method is that it is only sensitive to migration involving children of primary school age. Many migrants to Alaska and especially those who came seeking pipeline work did not bring children.

Stage II Techniques

The purpose of Stage II is to allocate the Alaska total population determined in Stage I among the 29 census divisions. Census division (or sub-state area) estimates are primarily established using a combination of four methods. These are: the employment censal ratio method; the employment/population ratio method; the ratio-correlation method; and the registered voter method. Since the two 'change in employment' methods have already been described, only the ratio correlation and voter registration methods will be described in the narrative for Stage II.

Ratio-correlation Method

The ratio-correlation method relates changes in each census division's share of Alaska's population to the change in each division's share of state births and deaths. The 'ratios' of the ratio-correlation method are developed as follows: For the two most recent decennial censuses, one calculates the percentage of state population for each census division. For example, the 1960 Anchorage population was 82,833, and the total Alaska population was 226,167. Thus Anchorage comprised 37 percent of the state total in 1960. However in 1970, the Anchorage population was 126,333, and at that time the population of Alaska was 302,361. Thus in 1970, Anchorage represented 42 percent of Alaska's population. In other words, the Anchorage share of the Alaska population increased from 37 percent in 1960 to 42 percent in 1970. Hence the Anchorage share of Alaska population grew to 114 percent of its 1960 share.

Presented arithmetically:

$$\text{Anchorage Share of Alaska, 1970} = \frac{\text{Anchorage 1970}}{\text{Alaska 1970}} = \frac{126{,}333}{302{,}361} = 42\%$$

$$\text{Anchorage Share of Alaska, 1960} = \frac{\text{Anchorage 1960}}{\text{Alaska 1960}} = \frac{82{,}833}{226{,}167} = 37\%$$

$$\text{Percent change in the Anchorage Share of Alaska} = \frac{\dfrac{\text{Anchorage 1970}}{\text{Alaska 1970}}}{\dfrac{\text{Anchorage 1960}}{\text{Alaska 1960}}} = \frac{\dfrac{126{,}333}{302{,}361}}{\dfrac{82{,}833}{226{,}167}} = \frac{42\%}{37\%} = 114\%$$

Thus 114 percent is the ratio of change for Anchorage between the years 1960 and 1970. This means that the Anchorage share of Alaska population grew by 14 percent during the decade between 1960 and 1970.

The general formula for calculating population ratios between 1960 and 1970 can be expressed in this way:

For each census division:

$$\text{Ratio-of-Change (Census Division)} = \frac{\dfrac{\text{1970 population (Census Division)}}{\text{1970 population (Alaska)}}}{\dfrac{\text{1960 population (Census Division)}}{\text{1960 population (Alaska)}}}$$

Similar ratios of change are calculated for births by Census Division and for deaths by Census Division (Additional symptomatic data series are in use in other states; however, changes from election districts to census divisions and changes in variable definitions have reduced comparability of many of these sub-state areas).

As mentioned above, the Anchorage share of Alaska *population* increased to *114 percent of the 1960 level by 1970*. Similarly, the Anchorage share of Alaska *births* increased to 113 percent. While in Fairbanks, the share of *population* declined (by 17 percent) to 83 percent of their prior share of Alaska's population; the 1970 Fairbanks share of births remained at 100 percent of the 1960 levels.

Ratios of change for each census division are calculated for each of the three variables: population, births, and deaths. Then these observation points are run in a multiple regression to solve for the population ratios of change in terms of the birth and death ratios of change.

The regression equation is in the following form:

Population–Ratio (C.D.) = A + Birth–Ratio (C.D.) x B + Death–Ratio (C.D.) x C

where:
A = Y intercept
B = Birth rate factor
C = Death rate factor
(C.D.) means "for each census division"

The ratios of change fed to the multiple regression are based upon changes observed between the years 1960 and 1970, years chosen because they are decennial census years when very accurate population counts are available for the state and its sub-areas.

Although accurate state population data has only been available at ten year intervals, reliable birth and death counts are available by census division on a yearly basis. The aim of the ratio–correlation technique is to provide a means of allocating the state's population among census divisions using available indicator data series. By substituting the 1970 to 1978 birth and death ratios into the above regression equation, it is possible to solve for 1970–1978 population ratios, and to use these to apportion a 1978 control total population figure.

$$\text{Population–ratio (C.D.) } 1970-1978 = \frac{\frac{\text{Population (C.D.) 1978}}{\text{Population (Alaska) 1978}}}{\frac{\text{Population C.D.) 1970}}{\text{Population (Alaska) 1970}}}$$

Solving for the Population (C.D.) 1978:

Population (C.D.) 1978 =

$$\frac{\text{Population-ratio (C.D.) 1970–1978} \times \text{Population (Alaska) 1978} \times \text{Population (C.D.) 1970}}{\text{Population (Alaska) 1970}}$$

This calculation will result in a set of census division population estimates which do not quite total to the original control total. The final step of this procedure is to adjust the derived total to the control total by allocating the difference among the census divisions in proportion to the size of each estimate.

Voter Registration Method

The voter registration method is based upon the assumption that the proportion of Alaskans registered to vote in each census division is *relatively* constant across the state. This method allocates the preliminary total population estimates across the 29 census divisions in direct proportion to the number of voters registered in each census division.

Stage III Techniques

At this point we now have a preliminary state total population estimate and four separate sets of estimates which allocate this total among the 29 census divisions. To check and calibrate these estimates we have special census data for the Kenai–Cook Inlet and Seward census divisions. For comparison we also have the 1977 Department of Labor estimates, U.S. Bureau of Census estimates, and locally prepared estimates. A great deal of indicator data has also been gathered which allows further investigation into census divisions upon which various estimates have diverged. Indicators include: births, deaths, marriages, telephone hook-ups, motor vehicle registrations, school enrollments, employment data, voter registrations, vote returns, tax returns, etc.

The purpose of this third and final stage is to coordinate information from these diverse sources into one final set of Alaska population estimates by census division. The range of lifestyles and population densities found in Alaska cause many types of data such as motor vehicle registrations and telephone main stations to be *useful* in a census division like Anchorage but *useless* in a census division like Angoon. The tack of stage three is to isolate a few census divisions which may be estimated with a high degree of certainty, and to test the other methods in these high certainty divisions. As already mentioned, special census data were available for the Kenai–Cook Inlet and Seward census divisions.

Applicable data was found for Fairbanks, Anchorage, and Juneau so that reliable estimates could be prepared for these census divisions. Using special census results and these three firm estimates, it was possible to check and calibrate each of the four sets of estimates produced in stage two.

Basically, the final 1978 estimates are averages of the four calibrated methods. However, for Kenai–Cook Inlet and Seward census divisions special census data was used. The final estimates are rounded to the hundreds place. In certain cases it was judged that a particular census division should be rounded 'down' rather than 'up' or vice versa to reflect additional information which had not been taken into account.

COMPARISON OF VARIOUS POPULATION ESTIMATES FOR ALASKA MUNICIPALITIES AND CENSUS DIVISIONS

Census Division	City, Town or Village	4/1/70 Census	7/1/75 Bureau of Census Revised Estimate	7/1/76 Bureau of Census Revised Estimate	1977–78 H&SS Village Nurse Census	7/1/78 State Revenue Sharing C&RA	7/1/78 Department of Labor	1978 Revised Estimates Bureau of Census
01 Aleutian Islands	Census Division	8,221	7,882	8,273			8,000	7,400
	Total of Places	1,463	1,734	1,889	2,029	2,508		
	King Cove	283	348	343	350	566		
	Saint Paul	478	540	588	350	550		
	Sand Point	360	429	448	529	773		
	Unalaska	342	417	510	800	619		
02 Anchorage	Census Division	126,385	161,018	179,865			185,500	179,800
	Borough	126,385	161,018	179,865		202,101		
	City	48,029	N/A	N/A	N/A			
03 Angoon	Census Division	503	844	791			600	900
	Total of Places	493	838	796	601	661		
	Angoon	400	706	664	500	527		
	Tenakee Springs	93	132	132	101	134		
04 Barrow--North Slope	Census Division	3,451	4,064	4,578			8,300	4,400
	Borough	3,451	4,064	4,578		8,187		
	Total of Places	3,027	3,598	3,774	2,765	4,155		
	Anaktuvuk Pass	99	160	167	175	173		
	Barrow	2,104	2,418	2,471	2,306	2,715		
	Kaktovik	123	147	192	134	192		
	Nuiqsut	–0–	25	26	150	182		
	Pt. Hope	386	425	464	N/A	464		
	Wainwright	315	423	454	N/A	429		
05 Bethel	Census Division	7,767	9,256	9,992			10,000	9,200
	City–Bethel	2,416	2,931	3,166	3,000	3,608		
	Total of Places	6,456	7,782	8,345	7,398	8,523		
	Akiachak	312	387	412	356	354		
	Akiak	184	179	196	195	192		
	Akolmiut	526	483	495	306	608		

COMPARISON OF VARIOUS POPULATION ESTIMATES FOR ALASKA MUNICIPALITIES AND CENSUS DIVISIONS

Census Division	City, Town or Village	4/1/70 Census	7/1/75 Bureau of Census Revised Estimate	7/1/76 Bureau of Census Revised Estimate	1977–78 H&SS Village Nurse Census	7/1/78 State Revenue Sharing C&RA	7/1/78 Department of Labor	1978 Revised Estimates Bureau of Census
05 Bethel (cont)	Atmautluak	–0–	128	136	147	186		
	Bethel	2,416	2,931	3,166	3,000	3,608		
	Chefornak	146	216	232	182	204		
	Eek	186	264	307	211	307		
	Goodnews Bay	218	241	245	245	248		
	Kwethluk	408	503	545	460	444		
	Mekoryuk	249	240	273	289	186		
	Napakiak	259	353	371	249	307		
	Napaskiak	188	231	249	224	215		
	Newtok	114	148	162	145	154		
	Nightmute	127	140	153	125	135		
	Platinum	57	78	73	59	58		
	Quinhagak	340	421	451	395	451		
	Toksook Bay	257	296	286	304	336		
	Tuluksak	195	205	227	204	231		
	Tununak	274	338	366	302	299		
06 Bristol Bay Borough	Census Division	1,147	1,311	1,313			1,400	1,300
	Borough	1,147	1,311	1,313		1,311		
07 Bristol Bay	Census Division	3,485	4,078	4,208			2,700	3,100
	Total of Places	2,487	2,960	3,095	3,291	3,218		
	Aleknagik	215	179	175	209	227		
	Clark's Point	95	95	88	35	98		
	Dillingham	914	1,160	1,207	1,326	1,360		
	Ekwok	103	118	111	103	111		
	Manokotak	214	234	250	263	250		
	New Stuyahok	216	294	306	296	297		
	Newhalen	88	99	105	204	105		
	Nondalton	184	219	224	207	226		
	Port Heiden	75	70	62	70	89		
	Togiak	383	492	567	578	455		
08 Cordova–McCarthy	Census Division	1,857	2,220	2,534			2,400	2,300
	City–Cordova	1,587	1,915	2,177	2,500	2,780		

COMPARISON OF VARIOUS POPULATION ESTIMATES FOR ALASKA MUNICIPALITIES AND CENSUS DIVISIONS

Census Division	City, Town or Village	4/1/70 Census	7/1/75 Bureau of Census Revised Estimate	7/1/76 Bureau of Census Revised Estimate	1977–78 H&SS Village Nurse Census	7/1/78 State Revenue Sharing C&RA	7/1/78 Department of Labor	1978 Revised Estimates Bureau of Census
09 Fairbanks	Census Division	45,864	50,670	56,924			55,500	52,600
	Borough	45,864	50,670	56,924	64,000	66,222		
	City–Fairbanks	27,278	30,061	33,956		30,462		
	Total of Places	27,543	30,522	34,560		30,923		
	Fairbanks	27,278	30,061	33,956		30,462		
	North Pole	265	461	604		461		
10 Haines	Census Division	1,504	2,138	2,152			1,500	1,700
	City	683	965	974	1,366	1,366		
11 Juneau	Census Division	13,556	16,749	18,635			19,500	18,800
	City & Borough of	13,556	16,749	18,635	17,000	22,105		
12 Kenai–Cook Inlet	Census Division	14,250	16,059	19,105			22,300	22,300
	Kenai Peninsula Borough	14,250	16,059	19,105		25,281		
	Total of Places	6,331	7,534	8,700	10,676	10,547		
	Homer	1,083	1,527	1,612	4,700	2,055		
	Kachemak	76	79	98	N/A	151		
	Kenai	3,533	4,028	4,837	5,364	5,364		
	Seldovia	437	480	522	612	612		
	Soldotna	1,202	1,420	1,631	N/A	2,365		
13 Ketchikan	Census Division	10,041	10,918	11,481			12,600	10,400
	Borough	10,041	10,918	11,481	13,500	13,071		
	City–Ketchikan	6,994	7,527	7,719		8,293		
	Total of Places	7,129	7,648	7,846		8,565		
	Ketchikan	6,994	7,527	7,719		8,293		
	Saxman	135	121	127		272		

COMPARISON OF VARIOUS POPULATION ESTIMATES FOR ALASKA MUNICIPALITIES AND CENSUS DIVISIONS

Census Division	City, Town or Village	4/1/70 Census	7/1/75 Bureau of Census Revised Estimate	7/1/76 Bureau of Census Revised Estimate	1977–78 H&SS Village Nurse Census	7/1/78 State Revenue Sharing C&RA	7/1/78 Department of Labor	1978 Revised Estimates Bureau of Census
14 Kobuk	Census Division	4,048	4,549	4,913			5,300	4,600
	City–Kobuk	165	152	176	N/A	176		
	Total of Places	3,639	4,132	4,646	3,006	5,102		
	Ambler	176	258	273	N/A	273		
	Buckland	104	133	151	201	176		
	Deering	85	108	122	107	117		
	Kiana	278	306	347	N/A	331		
	Kivalina	188	254	263	N/A	227		
	Kobuk	165	152	176	N/A	176		
	Kotzebue	1,696	1,813	2,060	2,698	2,526		
	Noorvik	462	569	626	N/A	524		
	Selawik	429	476	554	N/A	554		
	Shungnak	56	63	74	N/A	198		
15 Kodiak	Census Division	9,409	9,343	10,079			9,600	9,300
	Borough	9,409	9,343	10,079		8,926		
	City–Kodiak	3,798	4,351	4,706	15,161	5,754		
	Total of Places	4,716	5,137	5,536	16,193	6,760		
	Akhiok	115	103	118	114	118		
	Kodiak	3,798	4,351	4,706	15,161	5,754		
	Larsen Bay	126	121	131	137	137		
	Old Harbor	290	213	224	330	342		
	Ouzinkie	160	117	125	200	177		
	Port Lions	227	232	232	251	232		
16 Kuskokwim	Census Division	2,306	2,782	2,967			2,700	3,000
	Total of Places	1,589	1,955	2,153	1,982	2,198		
	Aniak	205	276	302	380	355		
	Anvik	83	90	102	92	102		
	Chauthbaluk	100	121	128	120	119		
	Grayling	139	172	183	145	181		
	Holy Cross	199	256	302	300	302		
	Lower Kalskag	183	212	218	225	218		
	McGrath	279	341	382	300	382		

COMPARISON OF VARIOUS POPULATION ESTIMATES FOR ALASKA MUNICIPALITIES AND CENSUS DIVISIONS

Census Division	City, Town or Village	4/1/70 Census	7/1/75 Bureau of Census Revised Estimate	7/1/76 Bureau of Census Revised Estimate	1977–78 H&SS Village Nurse Census	7/1/78 State Revenue Sharing C&RA	7/1/78 Department of Labor	1978 Revised Estimates Bureau of Census
16 Kuskokwim (cont)	Nikolai	112	143	152	90	152		
	Shageluk	167	205	223	170	223		
	Upper Kalskag	122	139	161	160	164		
17 Matanuska–Susitna	Census Division	6,509	11,038	13,331			15,400	16,100
	Borough	6,509	11,038	13,331		20,360		
	Total of Places	1,585	2,430	3,071	2,259	4,765		
	Houston	69	131	114	400	440		
	Palmer	1,140	1,626	1,930	1,859	2,141		
	Wasilla	376	673	1,027	N/A	2,184		
18 Nome	Census Division	5,749	6,228	7,088			7,200	6,700
	City–Nome	2,357	2,512	2,542	2,500	2,892		
	Total of Places	5,477	5,920	6,636	6,166	6,893		
	Brevig Mission	123	158	194	139	194		
	Diomede	84	88	107	120	125		
	Elim	174	209	288	200	288		
	Gambell	372	398	447	409	447		
	Golovin	117	87	107	123	118		
	Koyuk	122	120	160	80	160		
	Nome	2,357	2,512	2,542	2,500	2,892		
	St. Michael	207	228	283	220	283		
	Savoonga	364	410	490	450	409		
	Shaktoolik	151	139	163	143	163		
	Shishmaref	267	322	384	360	353		
	Stebbins	231	275	336	300	326		
	Teller	220	220	258	232	258		
	Unalakleet	470	550	632	632	632		
	Wales	131	107	130	150	130		
	White Mountain	87	97	115	108	115		
19 Outer Ketchikan	Census Division	1,676	1,771	1,832			2,000	1,400
	Metlakatla	1,050	1,110	1,137	1,100	1,119		

COMPARISON OF VARIOUS POPULATION ESTIMATES FOR ALASKA MUNICIPALITIES AND CENSUS DIVISIONS

Census Division	City, Town or Village	4/1/70 Census	7/1/75 Bureau of Census Revised Estimate	7/1/76 Bureau of Census Revised Estimate	1977–78 H&SS Village Nurse Census	7/1/78 State Revenue Sharing C&RA	7/1/78 Department of Labor	1978 Revised Estimates Bureau of Census
20 Prince of Wales	Census Division	2,106	2,641	3,069			2,600	2,900
	Total of Places	729	1,124	1,394	1,045	1,336		
	Craig	272	501	587	475	587		
	Hydaburg	214	317	456	420	380		
	Kasaan	30	40	46	30	46		
	Klawock	213	266	305	120	323		
21 Seward	Census Division	2,336	3,123	3,071			3,100	3,000
	City	1,587	2,143	2,507	2,285	2,130		
22 Sitka	Census Division	6,109	6,111	7,357			7,200	7,700
	Borough	6,109	6,111	7,357		8,787		
	City–Sitka	6,073	6,073	7,216				
	Total of Places	6,109	6,111	7,267	N/A	N/A		
	Port Alexander	36	38	51	45	101		
	Sitka	6,073	6,073	7,216	N/A	N/A		
23 Skagway–Yakutat	Census Division	2,157	2,638	2,872			2,800	2,800
	Total of Places	1,746	2,125	2,336	2,616	2,633		
	Hoonah	748	843	861	950	1,093		
	Pelican	133	209	221	200	221		
	Skagway	675	834	954	914	877		
	Yakutat	190	239	300	552	442		
24 Southeast Fbks.	Census Division	4,179	4,595	5,369			5,300	5,300
	Delta Junction	703	838	1,107	900	892		
25 Upper Yukon	Census Division	1,282	1,385	1,607			1,200	1,600
	Total of Places	484	527	688	900	761		
	Eagle	36	44	62	200	124		
	Fort Yukon	448	483	626	700	637		

COMPARISON OF VARIOUS POPULATION ESTIMATES FOR ALASKA MUNICIPALITIES AND CENSUS DIVISIONS

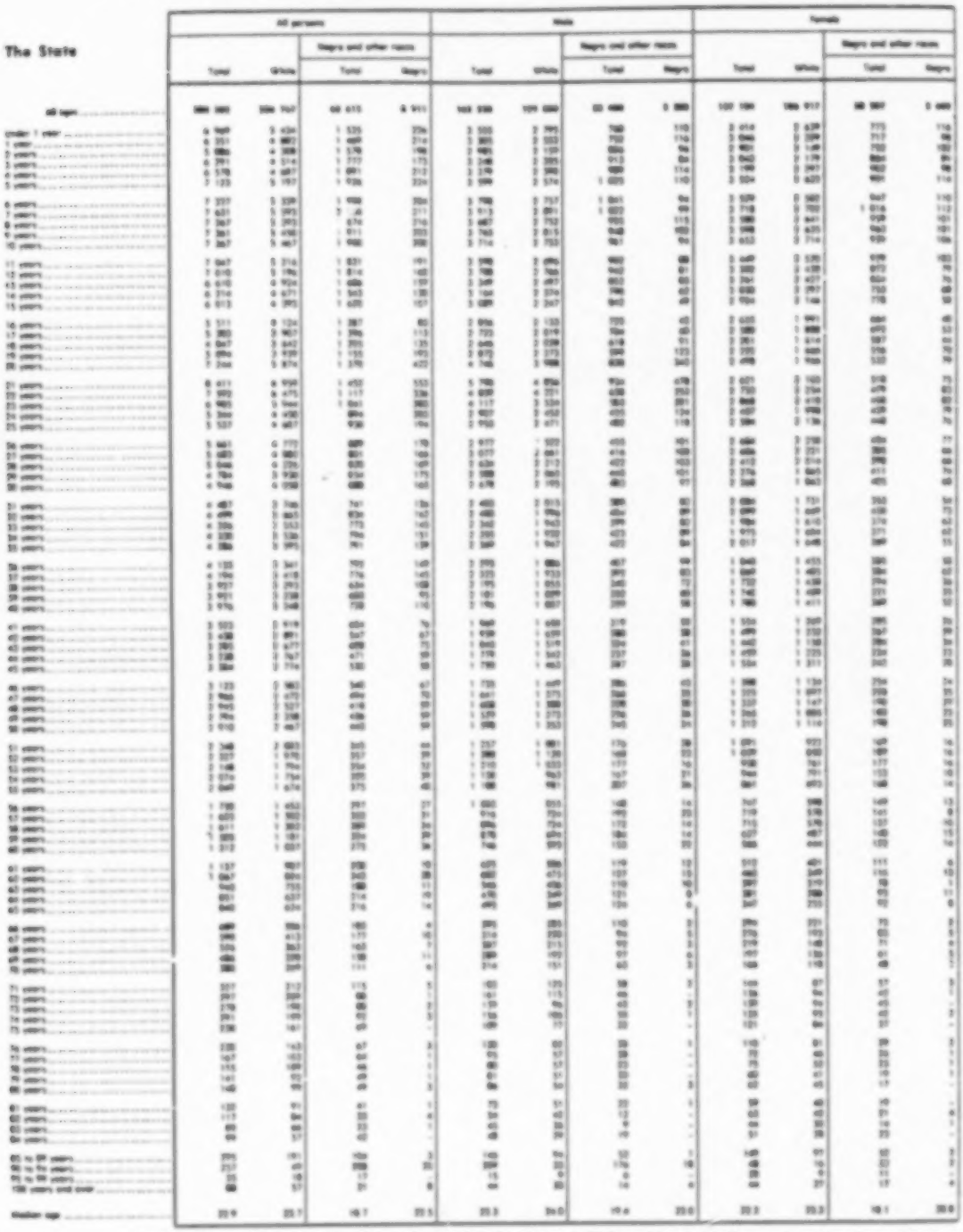
Census Division	City, Town or Village	4/1/70 Census	7/1/75 Bureau of Census Revised Estimate	7/1/76 Bureau of Census Revised Estimate	1977–78 H&SS Village Nurse Census	7/1/78 State Revenue Sharing C&RA	7/1/78 Department of Labor	1978 Revised Estimates Bureau of Census
26 Valdez–Chitina–Whittier	Census Division	3,098	5,245	8,023			5,000	8,200
	Total of Places	1,135	2,514	4,561	2,350	4,837		
	Valdez	1,005	2,287	4,205	2,200	4,481		
	Whittier	130	227	356	150	356		
27 Wade Hampton	Census Division	3,917	4,580	4,919			4,400	4,900
	Total of Places	3,665	4,325	4,665	4,533	4,526		
	Alakanuk	414	524	550	514	533		
	Chevak	387	425	461	450	461		
	Emmonak	439	537	556	537	556		
	Fortuna Ledge	176	224	245	235	210		
	Hooper Bay	490	597	648	736	648		
	Kotlik	228	308	342	302	305		
	Mountain Village	419	543	573	520	573		
	Pilot Station	290	281	294	311	301		
	Russian Mission	147	178	200	169	167		
	St. Mary's	384	409	461	425	436		
	Scammon Bay	166	165	192	225	193		
	Sheldon Point	125	134	143	109	143		
28 Wrangell–Petersburg	Census Division	4,913	5,859	6,102			5,600	5,800
	Total of Places	4,555	5,464	5,612	5,775	7,243		
	Kake	488	579	578	575	679		
	Kupreanof	36	40	42	N/A	42		
	Petersburg	2,042	2,231	2,334	2,000	3,197		
	Wrangell	2,029	2,614	2,658	3,200	3,325		
29 Yukon–Koyukuk	Census Division	4,758	5,385	5,936			5,500	5,900
	Total of Places	2,924	3,297	3,637	3,749	3,843		
	Allakaket	174	196	216	178	216		
	Anderson	362	421	459	N/A	470		
	Galena	581	667	728	650	631		

COMPARISON OF VARIOUS POPULATION ESTIMATES FOR ALASKA MUNICIPALITIES AND CENSUS DIVISIONS

Census Division	City, Town or Village	4/1/70 Census	7/1/75 Bureau of Census Revised Estimate	7/1/76 Bureau of Census Revised Estimate	1977–78 H&SS Village Nurse Census	7/1/78 State Revenue Sharing C&RA	7/1/78 Department of Labor	1978 Revised Estimates Bureau of Census
29 Yukon–Koyukuk (cont)	Hughes	85	75	84	70	98		
	Huslia	159	203	245	250	216		
	Kaltag	206	231	257	240	257		
	Koyukuk	114	100	111	80	124		
	Nenana	382	468	506	1,200	503		
	Nulato	308	359	382	400	382		
	Ruby	147	164	181	182	219		
	Tanana	406	413	468	499	499		
Total of Alaska Census Divisions		302,583	364,480	408,286		451,061	416,400	403,000

APPENDIX C

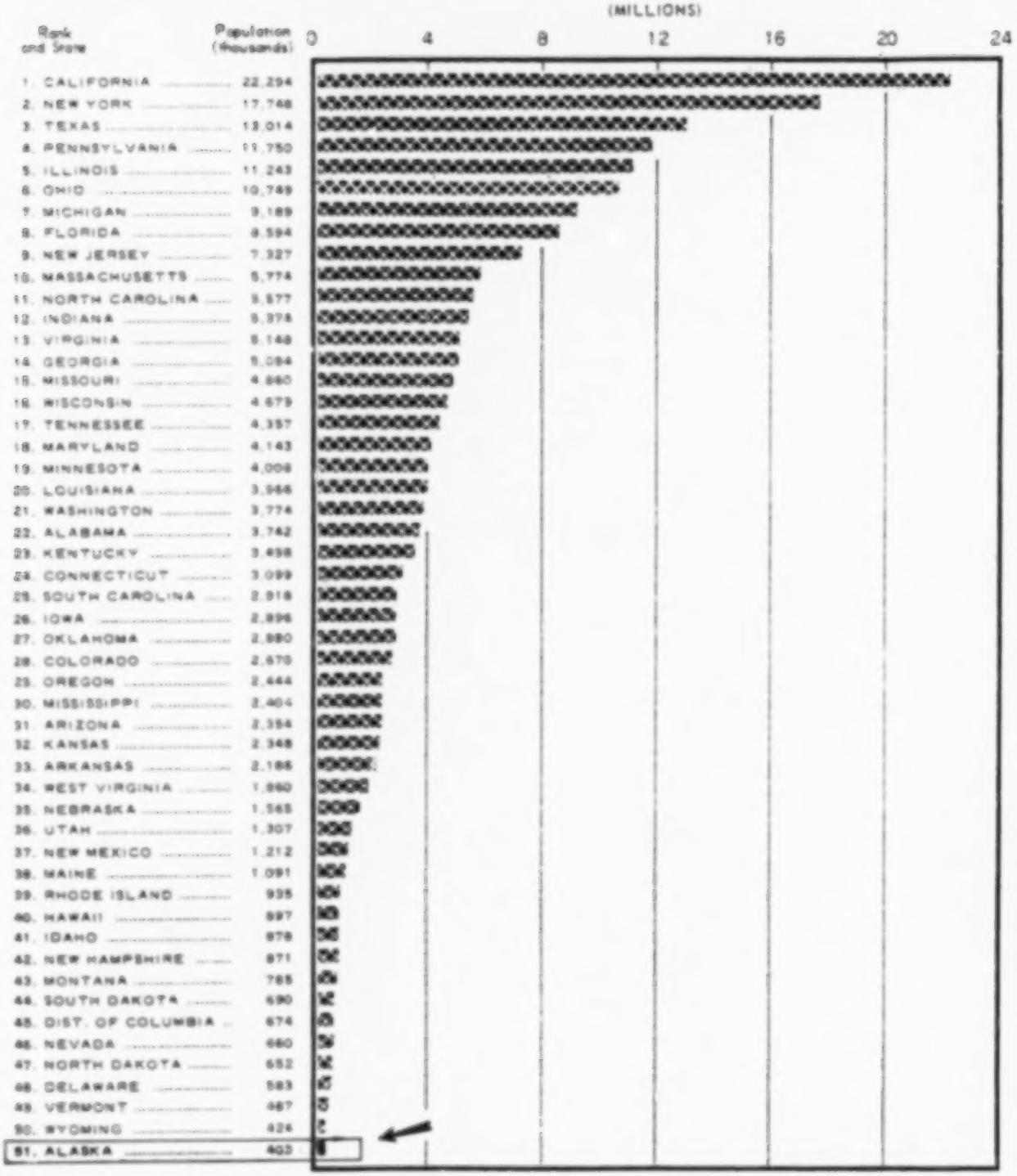
Single Years of Age by Race and Sex: 1970



Reprinted From: U.S. Bureau of the Census, Census of the Population: 1970 General Population Characteristics Final Report PC(1)-B3 Alaska PP 3-34.

APPENDIX D

RESIDENT POPULATION OF STATES, RANKED BY STATE
JULY 1, 1978[a]



Rank and State	Population (thousands)
1. CALIFORNIA	22,294
2. NEW YORK	17,748
3. TEXAS	13,014
4. PENNSYLVANIA	11,750
5. ILLINOIS	11,243
6. OHIO	10,749
7. MICHIGAN	9,189
8. FLORIDA	8,594
9. NEW JERSEY	7,327
10. MASSACHUSETTS	5,774
11. NORTH CAROLINA	5,577
12. INDIANA	5,376
13. VIRGINIA	5,148
14. GEORGIA	5,084
15. MISSOURI	4,860
16. WISCONSIN	4,679
17. TENNESSEE	4,357
18. MARYLAND	4,143
19. MINNESOTA	4,009
20. LOUISIANA	3,966
21. WASHINGTON	3,774
22. ALABAMA	3,742
23. KENTUCKY	3,458
24. CONNECTICUT	3,099
25. SOUTH CAROLINA	2,918
26. IOWA	2,896
27. OKLAHOMA	2,880
28. COLORADO	2,670
29. OREGON	2,444
30. MISSISSIPPI	2,404
31. ARIZONA	2,354
32. KANSAS	2,348
33. ARKANSAS	2,186
34. WEST VIRGINIA	1,860
35. NEBRASKA	1,565
36. UTAH	1,307
37. NEW MEXICO	1,212
38. MAINE	1,091
39. RHODE ISLAND	935
40. HAWAII	897
41. IDAHO	879
42. NEW HAMPSHIRE	871
43. MONTANA	785
44. SOUTH DAKOTA	690
45. DIST. OF COLUMBIA	674
46. NEVADA	660
47. NORTH DAKOTA	652
48. DELAWARE	583
49. VERMONT	487
50. WYOMING	424
51. ALASKA	403

ALL STATES: 218,059,000

[a]Source: Provisional Estimates, Bureau of the Census, U.S. Department of Commerce, December 1978.

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APPENDIX E

ACTIVE DUTY MILITARY IN ALASKA CENSUS DIVISIONS
1970 - 1979

CENSUS DIVISION	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
ALEUTIAN ISLANDS	3689	3592	6158	2877	2983	2856	2969	2790	1655	2175
ANCHORAGE	13684	13580	14177	13842	12581	12486	12018	11948	11716	11862
ANGOON	0	8	8	4	4	4	4	4	4	3
BARROW-NORTH SLOPE	108	107	99	100	119	104	109	95	19	17
BETHEL	95	90	90	100	105	108	99	92	15	15
BRISTOL BAY BOROUGH	0	420	400	440	517	456	452	459	310	369
BRISTOL BAY	439	0	0	0	0	0	0	0	0	0
CORDOVA-MCCARTHY	38	61	61	61	61	59	53	61	52	54
FAIRBANKS	9031	7542	6305	5889	5540	5445	5011	5472	5374	5580
HAINES	30	4	4	0	0	0	0	0	0	0
JUNEAU	205	203	203	203	203	262	271	288	284	275
KENAI-COOK INLET	484	383	53	53	53	57	53	56	52	55
KETCHIKAN	334	185	185	185	185	192	194	187	205	188
KOBUK	105	98	100	110	102	90	88	78	16	17
KODIAK	1491	1294	682	680	682	877	865	976	897	892
KUSKOKWIM	255	269	230	275	299	280	268	234	55	55
MATANUSKA-SUSITINA	6	0	0	0	0	0	0	147	158	147
NOME	151	139	132	137	155	150	144	120	42	41
OUTER KETCHIKAN	0	117	117	117	117	101	111	0	0	0
PRINCE OF WALES	0	0	0	0	0	0	0	0	0	0
SEWARD	91	53	53	15	15	18	15	15	0	15
SITKA	137	53	53	53	53	78	66	216	183	193
SKAGWAY-YAKUTAT	0	17	17	17	19	17	12	14	27	12
SOUTHEAST FAIRBANKS	0	765	800	860	689	682	761	793	797	849
UPPER YUKON	103	107	100	110	124	105	0	97	27	28
VALDEZ-CHITINA-WHITTIER	0	0	0	0	0	0	0	0	47	42
WADE HAMPTON	169	94	100	110	102	102	107	87	15	13
WRANGELL-PETERSBURG	51	23	23	23	23	15	18	22	14	14
YUKON-KOYUKUK	729	715	670	785	798	728	738	733	537	412
TOTAL	31425	29919	30820	27046	25529	25272	24427	24984	22501	23323

APPENDIX F

TOTAL RESIDENT POPULATION OF ALASKA CENSUS DIVISIONS

CENSUS DIVISION	CENSUS 1970	ALASKA DEPARTMENT OF LABOR ESTIMATES 1971	1972	1973	1974	1975	1976	1977	1978
ALEUTIAN ISLANDS	8057	7896	7245	6914	7714	7086	8282	7686	8000
ANCHORAGE	126333	135777	144215	149440	153112	177817	185179	192957	185500
ANGOON	503	485	484	402	481	481	494	559	600
BARROW-NORTH SLOPE	3451	2869	2539	2583	3234	6454	9609	9569	8300
BETHEL	7767	8232	8644	7906	8496	8576	8389	8048	10000
BRISTOL BAY BOROUGH	1147	1027	1121	1199	1239	1914	1252	1102	1400
BRISTOL BAY	3485	3200	3573	3659	3875	3847	3500	3521	3900
CORDOVA-MCCARTHY	1857	1941	1874	1982	1960	2003	2353	2233	2400
FAIRBANKS	45864	44415	46058	45571	50762	55517	51511	47131	55500
HAINES	1504	1647	1778	1902	2054	2069	1850	1500	1500
JUNEAU	13556	14564	15079	16593	17195	17714	18760	18886	19500
KENAI-COOK INLET	14250	14289	13923	13808	13962	15821	16753	19716	22300
KETCHIKAN	10041	10106	10558	10587	11522	11311	11394	12496	12600
KOBUK	4048	4733	4597	4352	4807	4548	4788	5100	5300
KODIAK	9409	9723	8703	8868	9232	8801	9366	8893	9600
KUSKOKWIM	2306	2371	2359	2484	2677	2721	2738	2481	2700
MATANUSKA-SUSITINA	6509	7337	8366	8586	9787	12462	14010	15740	15400
NOME	5749	5743	5857	5682	7001	6660	6644	5824	7200
OUTER KETCHIKAN	1676	1632	1660	1641	1703	1764	1761	2019	2000
PRINCE OF WALES	2106	1792	2049	1992	2525	2502	2000	2639	2600
SEWARD	2336	2593	2386	2446	2683	3149	3395	3392	3100
SITKA	6109	5977	6069	6010	6428	6595	6883	7053	7200
SKAGWAY-YAKUTAT	2157	2157	2135	2205	2476	2732	2812	2774	2800
SOUTHEAST FAIRBANKS	4179	4020	4113	4285	4504	5894	6811	4893	5300
UPPER YUKON	1282	1762	1817	1655	2642	8780	2012	1211	1200
VALDEZ-CHITINA-WHITTIER	3098	2949	3487	3568	3833	9639	13000	9905	5000
WADE HAMPTON	3917	3924	3823	3878	4164	4284	4287	3674	4400
WRANGELL-PETERSBURG	4913	4986	4960	5085	5848	5270	5218	5236	5600
YUKON-KOYUKUK	4752	4780	4809	5082	5243	8423	8238	4973	5500
TOTAL	302361	312927	324281	330365	351159	404634	413289	411211	416400

* NOTE: THE 1978 POPULATION DISTRIBUTION BY AREA WAS DEVELOPED USING A NEW METHODOLOGY. FOR THIS REASON, THE 1978 LEVELS ARE NOT COMPARABLE TO PRIOR YEARS ESTIMATES AND SHOULD NOT BE USED FOR TREND ANALYSIS.

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(Area Code – Alaska: 907)

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